GUY'S HOSPITAL GAZETTE NEW SERIES VOL. I 1876

GUY'S HOSPITAL GAZETTE NEW SERIES VOL. I 1876

Guy's Hospital Gazette.

Guy's Hospital Gazette.

THE WILLS LIBRARY
GUYS HOSPITAL MEDICAL SCHOOL

Presented by
The Presidents of the Physical Society
March. 1878

GUY'S HOSPITAL LIBRARY

Guy's Hospital Gazette.

A STUDENTS' JOURNAL OF HOSPITAL NEWS, MEDICINE AND SURGERY.

VOL. I.—NEW SERIES.

1876.

INDEX.

PAGE.

Alkaloid from Ergot of Rye 50
Aneurism, Clinical Lecture on... ... ... 6, 51
Aortic Aneurism, Cases of 46
Appointments 74
Apothecaries' Hall: Examination Papers ... 25, 71
Arctic Expedition 146
Articles, Leading ... 8, 20, 44, 56, 68, 80, 92, 104, 117, 128, 140
Artificial production of Organic Compounds ... 94
Aspiration in Strangulated Hernia 30
Athletics 26, 74, 84

Biennial Dinner, the 55
Birth 7

Cases, Medical 3, 36, 62, 70
Cases, Surgical 16, 48
Cases of Unilateral Kidney 134
Cancer of Stomach, Clinical Lecture on ... 99
Cataract, „ „ ... 40
Cyst, Parotid, „ „ ... 52
Christmas in the Wards 14
Chorea in relation to Insanity 19
Chloroform during Parturition... 73
Chronic Poisoning 73
Cæsarian Section 38
Clinical Thermometers 60
College of Surgeons: Pass List 95
„ „ Examination Papers 25, 43, 55, 71
„ Physicians: Examination Papers 11, 43, 54
"Conversation" 49
Conversazione, The 134
Council, Medical Examining 74
Correspondence 50, 98, 109, 146
Cricket 95
Cysticercus in Orbit, Case of 29

Delirium Tremens, Clinical Lecture on ... 15

PAGE.

Diabetes, Clinical Lecture on 27
Diphtheria, „ 39
Disease of Hip-joint „ 137
Dog, Removal of a Tumour from a 62
Duties, Medical... 14
Dysphagia of Organic origin 59

Electricity in Surgery 39, 106, 123
„ Thermometers 11
Electrifying Room ... 10, 22, 35, 58, 68, 90
Enlargement of Liver, Clinical Lecture on 125, 135
Epithelioma of Tongue „ „ ... 16
Expedition, Arctic 146
Eye Wards 42, 72

"Faith" 96
Fire-damp 50
Fœtus, Reflection of a 143
Football 12, 48, 134, 146
Foreign Journal 122

General News 19, 38, 50
German Medical Works 110
Gold Medals 95
Gynœcology 121

Hinton, The late Mr. 7
Hinton, William Bartlett 56
Hernia, Aspiration in 30
Heart Disease, Case of... 78
Hip-joint Disease, Clinical Lecture on ... 137
Hogden's Splint 36

Ilio-Femoral Triangle, Clinical Lecture on ... 6
Inguinal Hernia, Strangulated... 65

PAGE.

Insanity, Causes of 93

Jacksonian Essay 38
Junior Guyite Club 139

Kidney, Absence of 122
Kidney, Case of Unilateral 134

Leucocythæmia, Clinical Lecture on 87
Liver, Enlargement of 125, 135
London, University of 144
Lying-in Charity, Statistics of... 15

Medals, The 99
Medical Wards 23, 38, 60
„ Cases 3, 36, 62, 70
„ Session... 110
„ Works 110
„ Duties 14
Medicine, Lectures on Clinical
By Dr. Wilks 3
„ Dr. Pavy 15, 27
„ Dr. Moxon 39, 41
„ Dr. Taylor 60, 81, 87
„ Dr. Hilton Fagge 99
„ Dr. Habershon 125, 135
Memoriam, In 106
Mental Diseases ... 77, 93, 108, 118, 132, 137
Melancholia 132, 137
Mania, Acute 108, 118

"Nothing" 111
Notes of the Month ... 81, 93, 105, 114, 139
New Scholarships 56

Obstetrics 34, 42
Obituaries 7, 56, 106

Pass List 55
Parturition, Chloroform during 73
Pathological Society 7
Physical Society 8, 21, 44, 129, 141
Pleuro-Pneumonia, Case of 133
Physicians, College of 7

PAGE.

Poisoning, Chronic 73

Reflections of a Fœtus 143
Residents, April 50
„ May 60
„ June 74
„ July 86
„ September 109
Reviews 12
Rupture of Trachea 71
Rheumatism, Treatment of 119

Salicylic Acid in Rheumatism 84
Statistical Report 55, 72, 79, 95, 110
Specific Remedies 56
Specialists and Specialism 98
Surgery, The 47, 59
Surgical Wards, The 23, 60, 69
„ Cases 16, 48
Surgery, Lectures on Clinical
By Mr. Bryant 6
„ Mr. Durham 16, 137
„ Mr. Howse 52
„ Mr. R. C. Lucas 65, 75
„ Mr. Golding-Bird 89, 106, 123
Syphilis, Acquired and Inherited 75
Stomach, Cancer of 99

Torsion 38
Tragedy, The Wainwright 32
Tubercular Meningitis, Clinical Lecture on . . 63
Typhoid Fever, „ „ ... 81

United Hospitals' Athletic Sports 85
Unilateral Kidney, Case of 134
University of London 144

Vivâ Voce Examination 72

Wards, The Eye 42, 72
„ The Medical 23, 38, 60
„ The Surgical 23, 60, 69
„ Christmas in the 14
Wainwright Tragedy, The 32

Printed and Published for the Presidents of the Physical Society by W. Drewett, 43, Borough High Street, London, S.E.

989

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine, and Surgery.

NEW SERIES.—No. 1. JANUARY, 1876. SIXPENCE.

CONTENTS.

Clinical Medicine	3	Physical Society	8
Medical Cases	3	Electrifying Room	10
Clinical Surgery	6	Thermo-Electricity	11
The late Mr. Hinton	7	Royal College of Physicians of London (Ex. Papers)	11
Pathological Society	7	Football (Guy's v. St. George's)	12
Royal College of Physicians	7	Reviews	12
Birth	7	Christmas in the Wards	14
Leading Article	8	Medical Duties	14

NOTICE.

Those Subscribers who have not already paid their subscription to the new issue, or acknowledged the invoices sent them, will please do so at once, or their names will be struck off the books before the next issue in February. Those who have had no invoice will please send 5/6, the amount of subscription up to January, 1877.

We are this month sending out several hundred copies to Old Guy's Men. Those who wish to have a better knowledge of what is going on at their *Alma Mater* than can be gained by an occasional notice in other Medical papers, are asked to send their subscription and address at once, according to the terms stated.

2

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,

As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DR WECKER.
OPHTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

56, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

The Presidents of the Physical Society acknowledge with thanks the following donations to the "Gazette":—

Dr. F. W. PAVY ...	...	...	£1 1s.
C. S. Ticehurst, Esq.	...	...	£1 1s.

We cannot acknowledge all the Subscribers to this issue. Each will please consider the receipt of the "Gazette" sufficient for this purpose.

TERMS OF SUBSCRIPTION.

The "Gazeite" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to H. DAVY, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Medicine.

Dr. WILKS, in his last lecture of this session, made some remarks with regard to the use of the cold bath in fever heat. He said that the uniform temperature of the human body was a most remarkable fact, and it was ascertained that life could not go on if the heat reached 110°. If, then, this temperature be so injurious, it should be proportionally true of one lower but above the normal standard. The experience of German physicians was, that this mode of treatment could not only be used with impunity, but even with advantage. We were not prepared to go with them to the fullest extent not being sure of their data; but this we could say, in cases of extreme high temperature we were bound to use cold "to put the fire out," knowing, that the patient will otherwise die; it might be therefore that a temperature above 104° is an indication for this practice. Bathing had been but little adopted in England, but had been tried in the case that suggested these remarks, one of Enterica with high temperature, and it had certainly done good. The treatment was a complete reversal of our former idea of encouraging the symptoms of a fever, under the belief that they were inevitable, for while restraining the heat we check tissue change but without any detriment to the patient.

The next case was one of Chronic Bronchitis with Emphysema and long standing malformation of the chest.—The thorax was stated to be deformed from infancy, now it was markedly barrel shaped, very prominent in the middle line in front, and flattened laterally with a broad grove extending outwards on either side from the ensiform. Dr. WILKS remarked that these chests told their own history. They were formed normally, for malformations are due to morbid causes. A child has bronchitis and the smaller tubes get plugged with mucus; air can be expired, but not so readily inspired, for the attempt only plugs the tube more firmly; the result is, the air is pumped out of that portion of the lung connected with the affected tube, and *Atelectasis* or collapse takes place; with this there is probably some inflammation and softening; this leads to dilation of the tubes, and so these two processes go on simultaneously. These changes in the lungs have a corresponding effect upon the chest containing them. Barrel shaped chests were to be noted by their opposite characters to phthisical ones. In the latter, the distinguishing feature was lateral width and small antero-posterior diameter, a complete converse to the former type of thorax.

Dr. WILKS then turned his attention to affections of the brain, and remarked that no cases required more care in diagnosis than these. House-Surgeons sometimes fell into discredit for sending away these patients under the belief that they were the subjects of alcoholism. He did not blame them for not finding out what was the matter, but for pretending to be able to do so. No doubt if hospital accommodation was greater such disasters would not arise. It was impossible to distinguish between a man in a state of coma to whom a little alcohol had been given, and one who was in a similar condition from drink. A case of this kind was lately admitted, and, when the history came out, there were no less than three distinct causes for his delirium, convulsions and coma. He was drunk, he had fallen and struck his head and he was an epileptic, either of which conditions was quite sufficient to account for his state on admission. The day before, whilst going round, the nurse had run in from the next ward to say there was a man there choking from cough; on observing him, however, it was easy to see that the trouble was not in the chest, but was nervous. The man was in anæmic convulsions; this was suggested by his dropsy, and it turned out subsequently that he had just been admitted for Bright's disease, and the day before he became suddenly blind; he was immediately bled to 25 oz.; the prick of the lancet seemed to rouse him, for he struggled violently. In the course of an hour or so he became completely conscious, and the next day recovered his sight, but he subsequently died. Convulsions ought to have an uniform condition of brain corresponding to them. Now anæmia produced them; epilepsy was supposed to be due to bloodlessness from sudden contraction of the vessels of the brain, and in cases of death from the convulsion of kidney disease the brain was anæmic, but the question of the cause of the latter was an open one. The poisoning agent was not known, urea, uric and oxalic acids, creatine had all been suggested without sufficient proof; neither its source, for there were some physiologists who now said that urea was formed *in the kidney*, and not as was usually taught in the tissues.

It was to be noted in albuminuria in addition to the convulsions, there might be spasmodic twitchings of the muscles almost amounting to tetanus, and also a kind of croupy breathing. Œdema of the glottis was sometimes present, but tracheotomy had been performed on a healthy larynx.

Medical Cases.

The two following cases which have been under the care of Dr. WILKS in Clinical Ward lately, although different diseases, are examples of the cold water treatment in moderate hyperpyrexia, which has lately been tried with apparent success.

(For the sake of brevity many of the intermediate temperatures have been omitted.)

CASE 1.—S. P., æt 20, was admitted into 17 Clinical on November 10th, 1875, with acute rheumatism, 1st

attack. Her previous history was very good, and her occupation was a Kitchen-maid. She had had pains in her knees and ankles for seven days before admission, and had been somewhat unwell, but notwithstanding she continued her work for 3 days, when her symptoms much increasing she took to bed. On admission she was suffering pain in many of her joints, which were also red and swollen. Her tongue was coated with white creamy fur, with red edges, she had complete anorexia with much thirst. Her lungs were normal. The heart dulness was normal. Impulse very feeble, but apex beat in 5th space ½ inch internal to nipple line. Sound at apex very distant, especially the systolic which could hardly be heard, clearer at base. No bruit. Pulse 108. Urine 10·28, slightly acid. No albumen, nor sugar, nor deposit of lithates. Temperature 101·4° which in the evening was 102·6°. Pulse being 100 and respiration 24.

She was ordered Pb. Bicarb. gr. xx. ex. Mist. Potas. Nitrat. Pil. Col. c. Cal. gr. x. statim.

Nov. 11. Had much more pain in other joints. Heart sounds less distant, but there was a roughening towards base. Morning temperature 102·4°. Pulse 120. Respiration 26. Emp. Lyttæ reg. cordis. Evening temperature 101·2°. Pulse 116, Respiration 24.

Nov. 12. Pain still severe. A pericardial rub was heard faintly. Morning temperature 102·2. Pulse 100. Respiration 27. Evening temperature 101·5° Pulse 116. Respiration 24.

Nov. 13. In much pain and very low spirited. The rub is not loud, it being heard only on the 2nd left costal cartilage and 2nd space close to Sternum. Temperature 101·8°. Pulse 106. Respiration 24.

Nov. 14. Morning temperature 102·2°. Pulse 108. Respiration 25. Evening temperature 102° Pulse 122. Respiration 26.

Nov. 15. Pain in joints less. Has had sharp pain in left side but no rub audible. Morning temperature 102·6° Pulse 104. Respiration 32. Evening temperature 101·9°. Pulse 116. Respiration 28.

Nov. 16. No pain in joints or elsewhere. Rub about the same. Morning temperature 101·4°. Pulse 100. Respiration 26. At 9 p.m. Temperature 105°. Pulse 120. Respiration 24. Free from pain, mind clear, no delirium. 11 p.m. Temperature 105·8°. Pulse 132. Respiration 26.

Nov. 17. 12·15 a.m. Complained of feeling very cold. Tongue not dry. Not delirious. Temperature 105·3°, Pulse 130. Respiration 33. Shortly after this she was taken out of bed and placed upon a stretcher, which was covered with a mackintosh, and she was then wrapped up in a sheet wrung out of cold water, and fanned to cause rapid evaporation, and this was kept constantly wet by sponging with water. In an hour the temperature was brought down to 100·8°, when she was put to bed.

In 7½ hours, viz., at 9·30 a.m., the temperature was again 105·4°. Pulse 126. Respiration 26, and at 9·50 a.m. 105·7°. Pulse 128. Respiration 24. She had no pains and said she was quite well. She was not delirious but her manner was peculiar. She talked loudly. At 10·15 a.m. she was treated again with the cold water, and at 10·45 taken out with temperature 100·5°. Pulse 120. Respiration 32. At 11 a.m. temperature 98·8°. Pulse 136. Respiration 32. 11·30 a.m. Temperature 101·2°. Pulse 128. She then had some sleep. At 2·30 p.m. Temperature 102·8°. 3·30 p.m. Temperature 102° Pulse 125. Respiration 32. Sweating slightly, tongue rather dry. 4·40 p.m. Temperature 101·6°. Pulse 120. Respiration 28. 7 p.m. Temperature 104·6°. 9 p.m. Temperature 106°. The cold water was again applied as above for ½ an hour, viz., till 9·30 p.m. when the temperature was 100·2°. Pulse122. Respiration 34. At 11·40 p.m. Temperature 105·2°. Pulse 132. Respiration 24, and having thus risen again the process was repeated at 11·50 p.m. At 1·5 a.m. Nov. 18 the temperature in axilla was 99·6° and under tongue 101° and she was removed. After this it began to rise until at 10·10 a.m. it was 105·4°. Although she had some sleep she complained of pain in knees and back. At 10·20 a.m. the wet sheet was used again, until 12 noon, when she was put to bed, as although the axillary temperature was 102°, the patient shivered much and showed signs of blueness of face. In half an hour it rose to 102·7°, but then sank to 100·8° at 3·40 p.m. Pulse 106. Respiration 32. At this time she was sweating slightly, and had much headache, and pain in left side and a pleuritic rub was heard below left nipple. At 10 p.m. the temperature having again risen to 104·3° under tongue she was put into a bath the water being at 95°, and this was cooled down to 70°. At 11·10 p.m. she was taken out, temperature under tongue being 102·4°, and in axilla 97·8°. During the night she had some sleep, the temperature went up to 104·6°, but came down to 103·4° by 9·30 on the morning of Nov. 19, she then seemed better, her manner being quieter and the headache ceased. There was crepitation down the left lung behind with a little dulness at the base, but no bronchial breathing. Pericardial rub still present. The temperature fluctuated during the day, but in the evening rose to 105·4° again, but as she had previously borne the cold badly, it was determined this time to put her in a true wet pack. She was wrapped up in a wet sheet with two blankets around and then a mackintosh over the whole, it was supposed that this would cause her to sweat, and thus reduce the temperature, but in this it failed, the skin remained dry, and the temperature quite stationary, although she was in it ¾ hour. She was, therefore, treated in the same way as above with the cold wet sheet for another ¾ hour, till the temperature came to 101°. At this time she complained a good deal of the cold, but was not at all blue. She was put into bed, but soon afterwards shivering came on violently

and the lips blue and countenance dusky. Pulse very feeble. She was covered up and had some brandy, and after this gradually came round. In a few hours the temperature again rose to 105·5°, but taking into consideration the manner the patient had stood the baths, especially the last, it was thought advisable not to interfere again till the temperature went up much higher; so nothing was done, and in 4 hours it fell to 103·4°. This was 10·45 a.m., Nov. 20th, and she then still had the noisy exited manner, but no headache, and tongue was moister. Pericardial rub louder. No bruit. Still crepitation in left lung. Cough greater, sputa bronchitic. The temperature fluctuated during the day, at midnight rose to 105·2°, and then went down to 102° by 10 a.m., Nov. 21, when having had some diarrhœa she seemed weaker, otherwise about the same. The temperature varied again during the day, but its highest was 104·5°.

Nov. 22. 10·50 a.m. Had no pain, but was weak and low though still excited, there was dulness with bronchial breathing, &c., at right base, with rusty sputa. The temperature went to 104·6° during the day and descended.

Nov. 24. Some returning tenderness of the joints, and sweating, this sweat having the acid rheumatic smell. 10·15 a.m. Temperature 101·2°. Pulse 88. Respiration 30. 9·30 p.m. Temperature 99·6°. Pulse 100. Respiration 30.

Nov. 25. Much better in herself, quieter, not excited, had pains in legs, sweated a good deal. 10·45 a.m. Temperature 98·6°. Pulse 80. Respiration 25. 9·30 p.m. Temperature 98·4°. Pulse 104. Respiration 28.

From this time the patient went on improving, and the temperature never once rose as high as 101°. The pericardial rub disappeared, and no bruit was ever heard. On Nov. 27th she had a sharp pain in right side and a pleuritic rub was heard, and 3 days afterwards an ægophonic twang was added to the existing bronchophony. Since then these physical signs of consolidation have gradually given way to the normal ones, except a little dulness remaining, and the patient has quite recovered, her limbs however still being stiff.

The second case was one of typhoid fever. A. R., æt 10, who was admitted into Clinical on December 13th, 1875. She came from a neighbourhood where had been much typhoid about. For two weeks previous to admission she had been unwell and feverish, having had headache and general pains, but this was not severe enough to keep her home for the first week, the second week she became much worse, and she had diarrhœa, and became delirious. On December 12th she was seen by one of the extens (who was attending the mother) and the temperature at 4 p.m. taken by him was 106° and he sent her to the hospital the next morning. On admission she was heavy and drowsy, somewhat delirious, and said she was in no pain. She lay on her side with her legs drawn up in a peculiar position. Tongue was moist, with a thin white fur, and she had sordes on mouth. She had some diarrhœa, but not excessive, and motions were ochrey and fluid. There were a few spots on chest and abdomen, but not typical typhoid spots. She had a little cough, but lungs were normal with the exception of general sibilant rhonchi. Heart and urine normal. Temperature 104°. Pulse 132. Respiration 48.

Dec. 14. Had much muttering delirium in night, which continued, although less, in day. Tongue becoming brown, dry and cracked. 9·30 a.m. Temperature 104·6°. Pulse 132. Respiration 50. 9·20 p.m. Temperature 105·2°. Pulse 132. Respiration 60.

Dec. 15. Delirium continued, she was irritable and had some deafness, and more diarrhœa. At 8·30 p.m. the temperature was 104·8°. Pulse 120. Respiration 60. She was bathed for 20 minutes with water at temperature of 80°. This reduced it to 99·2°. Pulse 116. Respiration 36. After this she became quieter and less delirious, but had no sleep. It rose in 5 hours to 105·2°, but went down in another 6 hours to 101·6°. On the morning of Dec. 16th she was rather less delirious, but had more sordes and tongue very brown and dry. The temperature kept high all day, and at 4·15 p.m., it being 103·5°, she was placed on a stretcher and sponged with tepid water and fanned in the same way as the other patient had been done. The temperature sank to 100·6° in 30 minutes, when she was removed. At 9·30 p.m. it was 105°, and she was treated in the same way for 20 minutes, but it only came down to 103·3°. She was delirious in the night, but next morning, Dec. 17th, she was quieter and less torpid, tongue a little moist and no diarrhœa. 2 p.m. Temperature 103·8°. Sponged and fanned again for 20 minutes, the temperature at the end being 101°. It rose in $2\frac{1}{2}$ hours to 104·6°, when the process was repeated, the temperature in 25 minutes being 102°. In $3\frac{1}{2}$ hours from this time it had again risen to 104·1°, and was then cooled down in 30 minutes to 101·8°. This was 9·50 p.m., at 10·15 p.m. it was 101·4°, but then gradually rose till 10·30 a.m. Dec., 18th, when it was 104°. She had had a much better night, with some sleep, and now was not delirious, less deaf, and less torpid. The temperature was reduced to 102° in 25 minutes in the same manner as before, but rose again in $2\frac{1}{2}$ hours to 104·3°. This time a small bath having been procured she was immersed, and the temperature brought to normal in 15 minutes. In another $2\frac{1}{2}$ hours, however, it was again 104°, and she was again wholly immersed in water at 75°. In 7 minutes the temperature was 98·4°, and she shivered and was then put to bed. The temperatures were taken in the axilla, and the arm held closely to the side. From this time she improved, had no more delirium, the deafness and torpidity subsided, and diarrhœa ceased, the temperature went above 103° three times, but never higher than 103·7°. On the 27th Dec. it was

normal, and since then it has kept low, with one or two exceptions in the evening, and the child is quite convalescent. Throughout the whole illness there has been no chest complication, only evidence of slight bronchitis.

Remarks.—It will be remembered that in the *Gazette* of October 9th, 1875, was published a case of acute rheumatism, which had been treated by means of cold before the temperature rose to a serious height, although it was expected that this would take place, it was most successful, and since then, with others, the same method has been used with good result. In neither of the two cases reported above did the temperature exceed 106°, but on the assumption that if 110° is fatal, a lessor degree of heat is injurious, it was thought advisable to use cold before it got too high. In the case of the first patient the symtoms which usually accompany hyperpyrexia were begining to show themselves, viz., the cessation of pain in the joints, the absence of sweating, and although she was not delirious, she had a strange manner about her, indicating some cerebral disturbance, she was therefore cooled down, and the method of doing so, viz., with the wet sheet was here chosen for convenience sake, as the bath could not well be used. It is a somewhat uncertain mode, but one that might be adopted when a bath of sufficient size is not obtainable. During the process she complained loudly of the cold, thus offering a contrast to the next patient to whom it seemed not disagreeable.

In the child with enterica—as this is a disease in which the temperature does not rise to a fatal height—the object in reducing it was rather to avert the effects which even a temperature of 104° or 105° entails. This is a mode of treatment used largely on the Continent, many of the Germans never allowing the temperature to get above 103°. In this case it appeared to be beneficial, for the symptoms could hardly have been worse than they were before the bathing, and afterwards marked improvement set in. The immersion in water at a low temperature, as was done at the end, seemed to be more efficacious and required a much shorter time to bring down the temperature than the sponging, and it would have been used earlier if there had been a bath of convenient size; when this was obtained it was placed by the bedside and the patient lifted into it, so causing not much disturbance.

Clinical Surgery.

Mr. BRYANT'S Clinical Lecture, on Wednesday, December 15th, comprised two subjects, viz., Aneurism and the value of the Ilio-femoral triangle in the diagrams of Injuries of the Hip-joint.

The case of Aneurism was one that was in Clinical Ward a short time before; the patient was a young man, aged 29. He had been temperate, and had not had syphilis; he had had rheumatic fever three times, and after the first attack, 9 years ago, his heart was affected. History of pain in the right groin for the last 4 years, at intervals, with swelling which was probably glandular. Three weeks before admission he stumbled, and a day or two after had pain in the leg; did not rest and the pain continued. Four days before admission, according to his own account, he felt that the swelling pulsated; the pain became worse, and he suffered from constitutional disturbance.

On admission, he was a pale anxious looking man, in a feeble state of health. There was a double bruit at the base, and the pulse was of a "water hammer" character. He was evidently the subject of aortic valvular disease. In the right groin there was a diffused swelling extending 4 or 5 inches below Poupart's ligament, also a little above; this swelling pulsated; there were enlarged glands in front of the swelling; the leg was rotated outwards and partly flexed, and the whole limb was swollen.

This was on the 15th of November, and on the 19th the pulsation ceased. Mr. BRYANT said that he saw him on the 19th, when the swelling occupied the upper third of the thigh and passed beneath Poupart's ligament upwards towards the spine; it was hard in parts, indistinctly fluctuating, the femoral artery was pushed forwards by the swelling. Pressure on the iliac artery made no impression upon the tumour.

The history pointed to aneurism, but the difficulties which seemed to oppose this diagnosis were, that the swelling was behind the artery, that it was hard in some parts and soft in others, that it did not pulsate when seen.

From one or two points, such as the constitutional disturbance, the fluctuation, &c., Mr. BRYANT was inclined to look upon it as an abscess situated beneath the iliac fascia extending into the thigh. There was, however, a distinct bruit to be heard through the swelling, which Mr. BRYANT thought was conveyed through the tumour from the femoral artery which was in front of it, although he confessed that, at the time, he did not attach so much importance to this point as he ought to have done, and will look upon it as one more worthy of regard in future.

Being in doubt as to the nature of the tumour, he punctured it with a grooved needle, and drew off nothing but broken up blood; this decided the diagnosis, for it could not be a soft cancer or there would have been drawn off pure blood with little masses of creamy stuff mixed with it. Mr. BRYANT then, having formed a diagnosis in favour of aneurism, considered the question of operation, and decided to tie the external iliac artery. The patient had severe heart disease, but he had taken chloroform well before, and was evidently dying of hæmorrhage. The operation was performed the next day, and in itself did not seem to hasten his end. He died 16 hours after the operation.

At the P.M. it was found that the aortic valves

were extensively diseased, the vessels were healthy, there were embolic patches in the spleen and kidney, and an old apoplexy in the brain.

Mr. BRYANT exhibited a dissected preparation of the thigh and pelvis of the patient, which showed that the walls of the sac were formed by the iliac fascia up to the spine and inwards as far as the brim of the pelvis, below Poupart's ligament by the fascia lata and muscles. The sac communicated with the common femoral artery one inch above its bifurcation by a vertical opening half an inch long. The artery itself seemed healthy, and the opening in it looked like a vertical rupture of its coats.

The only thing Mr. BRYANT regretted was that he had not performed the operation earlier.

He then went on to speak of the diagnosis of injuries and diseases of the hip-joint, the former more particularly, and the interest which attaches to them, being so often obscure in point of diagnosis. He drew attention to the method first pointed out by him at one of the Societies last year, by which these injuries and diseases can be very simply diagnosed, viz., by means of a line which forms the base of what he has described as the ilio-femoral triangle. The chief object of this is to measure, without disturbing the patient, the neck of the thigh bone; it is done thus:—the patient is placed perfectly level on his back with his pelvis quite straight, and two points of bone, readily made out in the fattest person, are felt for, viz., the anterior superior spine on each side. To commence with the sound side; let fall a perpendicular line from the point mentioned, with a tape to mark the line, and then feel for the tip of the great trochanter, measure the distance from the perpendicular line to the trochanter,—this line is the "*test line.*" Compare this with a line similarly measured on the side supposed to be injured or diseased. When broken, shortening is found to exist on the injured side, and shortening of the neck of the femur is at once suggested. On the sound side in an ordinary sized person the distance will be from $2\frac{1}{2}$ to 3 inches, on the opposite side it will be less or equal according as there is or is not any shortening of the neck of the thigh bone. Mr. BRYANT showed some diagrams illustrating this plan of measurement, and pointed out one or two other things about the ilio-femoral triangle, referring also to Nelaton's line for diagnosing dislocations of the hip.

The advantages of this way of measuring shortening of the neck were most valuable; one only has to take these simple measurements, and if there is found an inch difference on one side there is a strong fact which has got to be explained. The advantage of it is great in impacted fractures, where forcible attempts to make out a crepitus by manipulations of all sorts would most likely loosen the impaction.

There are two sources of fallacy in this method, viz.:—in the case of fracture of the trochanter, and in impacted fracture without shortening.

Two cases were then quoted, one of an old man who was supposed to have fractured the neck of his thigh bone, but this means of diagnosis showed that there was no fracture, and he was well in 9 or 10 days; had it been treated as a fracture, he would have been in bed 6 or 8 weeks. The second case was still more remarkable. An old lady fell and injured her hip; a surgeon was sent for and said she had fractured the neck of her femur, then an eminent surgeon was sent for and he confirmed the diagnosis, the probabilities being all in favour of such a diagnosis. She was put in bed with a splint, got worse and worse from confinement to bed; another surgeon was seen, who used the above method of diagnosis, and he, after carefully examining her, said that there was no fracture at all, and told her to get up and stand at once; she did so, and soon after walked perfectly well. This was a most striking case showing the value of the method of diagnosis.

Mr. BRYANT then gave some statistics of fractures of the neck of the femur, and shewed that during the last 3 years there had been admitted into his wards at Guy's 18 cases of fracture of the neck of the femur in people whose average age was 75 years, and all of these went out with useful limbs. This success Mr. BRYANT attributed to the house-surgeons and dressers having used the ilio-femoral triangle as a means of diagnosis.

THE LATE Mr. HINTON.

Death has taken away one who was, until recently, a distinguished member of our hospital staff. It is not for us to write an obituary on so remarkable a man, it is beyond us, but it has been ably done in the last week's "Lancet" by his friend Dr. WILKS, who *knew* him well. As a writer in his own department of surgery, Mr. HINTON attained to eminence, but, it is as the philosopher he desired to be remembered; as the promulgator of those doctrines of which he gave us so remarkable an example in his introductory lecture of three years ago.

THE PATHOLOGICAL SOCIETY.

Dr. MOXON has been elected one of the Vice-Presidents, and Drs. PYE-SMITH and GOODHART have been appointed on the Council for the present year.

THE ROYAL COLLEGE OF PHYSICIANS.

The Lumleian Lectures will be delivered for the present year by Dr. HABERSHON, on March 31st, April 5th and 7th, at 5 o'clock each day, on "The Pathology of the Pneumogastric Nerve."

BIRTH.—On the 28th ult., at Bootham, York, the wife of W. H. JALLAND, F.R.C.S.E., of a daughter.

GUY'S HOSPITAL GAZETTE, *JANUARY*, 1876.

IN bringing out the first number of the new series of the GAZETTE, we feel that a few remarks are not out of place to our subscribers, especially as there will no doubt be many who are still unacquainted with the proposed change. We have already in the last number assigned the reasons which induced the conductors of the GAZETTE to work so radical a change, and these need not be repeated here. We only hope that the present number will find favour with all Guy's men, and that they will continue to support the periodical. We desire that the sphere of the usefulness of the GAZETTE may be extended, and that it may be alike more useful to present students and to country subscribers. For this purpose we desire to say a word to all who are in any way interested in its welfare. It will still be our purpose to report as heretofore clinical and other lectures as far as possible; to publish reports of interesting and instructive cases both medical and surgical; and to notice general medical news so far as it may be interesting to students. There will be many no doubt who will not look upon the monthly issue with favour because the list of cases admitted during the month, will be of little use for those intending to visit them, this we hope to remedy by giving each month a statistical account of all cases admitted; to note especially those interesting ones which will be in for some time, and to append a short report of any of special interest which may have died during the month.

A new feature in the present series will be a "Diary for the month" which shall follow the list of contents on the first page, in this we hope to include all the athletic engagements as well as any other news which we may know in advance.

This reminds us of another point, viz., that we shall always be glad of communications from subscribers, as letters, reports of cases, original communications or any interesting matter, and we especially desire that the athletic club will send us a report of their engagements or of their meetings.

We sincerely hope that all students of Guy's will think it their duty to support the GAZETTE, and not leave it in the hands of a few, upon whom the burden must fall heavily. For news, we look to all subscribers, knowing that there is much of interest which does not fall in the way of senior men, and perhaps some junior men may on this account justly complain; it is for this reason that we invite communications from *all* subscribers. Once more we look forward to the new year with hope that our new enterprise may be carried safely to the end of 1876.

Physical Society.

DEC. 18TH, 1875.

The minutes having been read, the Chairman called upon Mr. JOHN TODD to read his paper on Typhoid Fever, of which the following is an abstract.

Typhoid Fever may occur either as an endemic or an epidemic. It attacks males sooner than females, out of 200 cases, 113 were males and 87 females. It also attacks people mostly between the ages of 10 and 30; out of the 200 cases just mentioned, 172 were between the ages of 10 and 30, 16 were between 30 and 40, 2 were between 40 and 50, 1 was between 50 and 60, 1 was over 60, and 8 were under 10 years of age. Typhoid Fever, he said, was undoubtedly contagious, and mentioned 17 cases taking the fever from one another, and thought that, from these alone, the contagious nature of Typhoid Fever was incontestable. The death rate of the fever is not so very great considering the number of complications that may take place. Out of 200 cases, death occurred in 26; of these, 18 died from complications, perforation and peritonitis killing most, the other 8 died from exhaustion.

There are two eruptions peculiar to Typhoid Fever, one on the skin and one on the intestine. The eruption on the skin consists of small circular prominent rosy patches, which disappear upon pressure. They have a duration of from 4 to 12 days. Spots generally appear about the ninth or tenth day. The eruption on the intestine occurs in the small bowel, and affects Peyer's patches and the solitary glands. The glands become affected about the fourth day so most think, but some say that they do not until the seventh or eighth day. The glands and patches increase until the ninth or tenth day, when one of two things takes place: either resolution, or they go on increasing and about the twelfth or thirteenth day run into what may be termed the ulcerative stage. The glands and patches are very prominent with slight erosions on their summit, on the fourteenth or fifteenth day a core forms, which in a day or two is entirely detached and leaves in its place a deep ulceration, and it is from these ulcerations that some of the complications of Typhoid arise, viz.:— peritonitis, perforation and intestinal hæmorrhage.

Causes.—It is the result of some poison being taken into the system, either from the effects of bad drainage, or from effluvia arising from pig-sties, or stagnant pools being too near the house, or from spoiled articles of food and contaminated drinks; milk may be the cause of the spreading of the fever, or it may be taken from the effluvia arising from the fæces of a patient.

In describing the symptoms he said that the gurgling sound in the right iliac region was once looked upon as a very diagnostic sign of Typhoid, but it has fallen through and very wisely, as it may occur in people at any time. Out of 250 cases, in which he has tried to get this gurgling sound, it was found in 149, and occurred mostly in children; of 125 children it was found in 92, and of 125 over puberty in 57. The temperature during the first week rises very slowly, it may be a degree or two higher in the evening than in the morning; but about the seventh or eighth day it rises to 103° or 104°, and remained so during the whole stage of fever; it may even rise higher during the second and third stages.

He then mentioned the chief distinctions between Typhoid and Typhus. Each crop of Typhoid spots lasted from 4—12 days. Mr. TODD then mentioned the complications of Typhoid Fever, and proceeded to give the post-mortem appearances in fatal cases.

The prognosis was unfavorable where complications existed and where there was persistent diarrhœa, and was favorable when the patient could take nourishment. Under treatment, he said, it was important to remove disagreeable odours. Sponging the patient night and morning with vinegar and water, and washing out the mouth with a weak carbolic acid lotion was useful. He objected to medicine unless there were complications. If constipation was prolonged, a small dose of castor oil would do no harm if judiciously used. If the temperature rose above 105·8° he would bath, not bringing it below 101°, as by so doing the patient's life is endangered. Complications should be treated as they arise. No solid food should be given for at least ten days after convalescence has set in, then fish for a week, chicken for the next three days and then meat. The patient should not be allowed to go out too soon, as albuminuria might set in.

In the absence of Mr. EVANS, the reader of the last paper, the discussion was opened by Mr. BEVAN. He disagreed with Mr. TODD's statement that the temperature reached its maximum on the seventh day, he thought it was usually supposed to reach that point in the fourth day. He thought it scarcely necessary to give the points of distinction from typhus. The microscopical appearances had been omitted, and these as given by Klein he thought important, and shortly described the typical changes. He thought more stress ought to have been laid on Pneunomia as a complication. Opium was rather to be avoided as a drug in typhoid, he thought many cases were improved by sponging with cold water rather than by bathing.

Mr. GATHERGOOD thought it better to administer opium by the bowel than by the mouth. He thought it important to so dispose of the excretions that they should not contaminate drinking water As regards the question of contagion upon which Mr. TODD had laid so much stress, he said Murchison had stated that the disease might arise *de novo*, while Dr. WILKS says that it is not contagious. He thought the spots generally lasted 3—4 days and not 4—12 as stated by Mr. TODD The mesenteric glands were often enlarged, he quoted a case showing this fact. He thought espitaxis a minor point as it could easily be arrested by plugging, but hæmorrhage from the bowels was more important as this could not be so readily managed.

Mr. BRETT said that Murchison states that the flush on the cheeks is diagnostic of the disease, and he thought more stress ought to have been laid upon this point. In cases were there was very little ulceration found. P.M. the peculiar degeneration which the muscles undergo would often clear up the case.

Mr. RICHARDSON said that the fluid diet was given so that the peristaltic action of the intestines should be restrained, and that, therefore, ol. Ricini as recommended was contrary to this purpose. He asked if the distemper of dogs was similar to typhoid, and quoted a case where a person had been attacked with the fever after attending to some dogs suffering from this disease, there being no other means of accounting for the attack. Was it possible that the excreta of the dogs might set up the disease, or was the distemper similar to typhoid?

Mr. A. G. LACY thought that Pneumonia was to be looked upon as more than a complication. In some of Mr. TODD's cases showing the contagious nature of typhoid, he thought that probably the drain mentioned was close to the house. He thought it made a great difference what time the abdomen was examined, whether gurgling was obtained or not. The motions might be yellow in typhus for a time, and he quoted a case showing this. Patients he thought were too ill to take tannic acid and astringents, and that washing out the mouth was also unadvisable. He thought astringents were not indicated, as it stopped nature's method of getting rid of the poison.

Mr. MACKERN considered treatment was the most important point, he thought it difficult to distinguish typhoid from surgical fever and other low conditions. Unless we can avert the changes in Peyer's glands not much can be done to cut short the disease. The cold bath seems successful but he thought that by moving the patient perforation was more liable to occur. The temperature also went up generally after the bath. He referred to a case in Clinical, when the temperature had been reduced several degrees by a cold bath with marked benefit. He preferred the bath to the sponge, and he thought the patients seemed to enjoy it. He thought it bad treatment to give ol. Ricini, and he inquired whether anything was known as to the relation of typhoid to puerperal fever. He had lately attended a lying-in woman, in the same bed with whom, was a child suffering from typhoid, and up to the present time (6 days) there were no signs of any fever in the mother. He had found in the Obstetrical Society's transactions, a case of puerperal fever referred to typhoid as its cause, the patient showing symptoms on the tenth day after delivery.

Mr. LUBBOCK thought the cause of typhoid was the most important subject. Bad drainage was known to generate the disease, and it is important to discover whether it could be set up by water, drains, &c. He inquired whether the mesenteric glands were primarily or secondarily affected. Harley has said, that the poison is absorbed from the intestines, is thence carried to the liver, and then acting on the bile so alters it, that the patient does not change the chyme and the

bad chyme acts on the solitary glands producing the ulceration, and that he therefore gave a little mercury early in the disease.

Mr. HORROCKS thought that people in the vicinity of the disease might get their blood into such a condition as not to be liable to the disease. He inquired why Mr. TODD preferred to keep the temperature between 101°—105°. Was it because the poison was "burning away" and so it was better to keep the temperature about normal? He inquired whether ol. Ricini would not initiate diarrhœa, and asked if this was dangerous, and if not ought it not to be given so as to get rid of the poison, and so empty the glands.

Mr. LANCASTER said the subject of hyperpyrexia had not been mentioned in the paper. The received opinion was that typhoid was not contagious in the ordinary way, but that undoubtedly the disease could be spread by the excreta. He referred to the treatment of the disease by the cold bath, even, when the temperature was not above 102° or 103° as was when used by the Germans, and according to many authorities with better results, and the chest complications were lessened in frequency and mortality. The use of the cold bath for a shorter time (not more than 10 minutes) was probably better than the more prolonged use of a warmer bath. He then mentioned the case of typhoid in a child at present in clinical ward, in which the temperature had been up to 106°, she had been bathed 9 times and in this way the temperature was not allowed to go above 104°, at first her symptoms were very bad with much muttering delirium, but since, the improvement had been great.

Mr. REYNOLDS said that from the paper this evening that apparently there is no difficulty in diagnosing typhoid, but he thought that in cases of rheumatism where there was ulcerative endocarditis and even diarrhœa and rash there was difficulty, but in these cases there was no affection of Peyer's patches and no change in the muscle. He thought there were very many examples to show that typhoid was not contagious. Gurgling, he thought, was valueless as a symptom, he deprecated habits of feeling for the signs as liable to increase the abdominal trouble. Mr. TODD has omitted the changes in the ulcer, he then described the stops of ulceration. If the patient died without complications, Peyer's patches were always found ulcerated. In a case already quoted only two small ulcers was found, with another in arytænoid cartilages and in this case Zanker's change was found in the muscles of the thigh, this change he said occurred in phthisis, cholera, and other wasting diseases, but is a help in diagnosing obscure cases. He thought Enemata better than ol. Ricini. He thought that in bathing the temperature might be lowered to normal without danger of collapse.

Mr. LANE had understood, that if the temperature did not rise to 104° or so before the seventh day, it was not typhoid. If the disease did not arise from drains, &c., it must arise *de novo*, it had been found in some army statistics that the men in healthy ports had typhoid, while those attending on fever patients were exempt from the disease.

A vote of thanks having been voted to the author of the paper the meeting adjourned.

ELECTRIFYING ROOM.

REPORT ON CASES TREATED IN THE ELECTRIFYING ROOM, FROM 1864 TO 1875 INCLUSIVE.

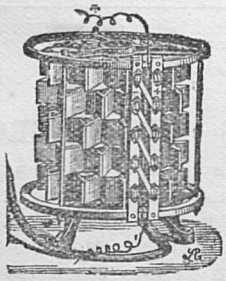
By R. J. PYE-SMITH, F.R.C.S.E., AND J. H. SANDY.

During the past twelve years a record, more or less imperfect, has been kept of the cases treated in the Hospital by Electricity in one or other of its forms, and although till within the last four years the method of treatment and the result were but rarely recorded, there is perhaps enough of interest in the mere statistics of diseases treated, to warrant their publication. It is hoped that during the present year an improved method of registering the most important features of every case will lead to more valuable results, and a few years' observation in so large a field as our Hospital affords ought to be enough to raise the electrical treatment of many classes of cases from experiment to experience. Meanwhile we propose to extract what we can from our present materials by the following statistical table of cases, and by a few subsequent remarks on the results of treatment.

ANALYSIS OF CASES TREATED BY ELECTRICITY FROM MARCH, 1864, TO DECEMBER, 1875.

NAME OF DISEASE.	NUMBER OF CASES.
Hemiplegia	114
Paraplegia	41
Paralysis of muscles of face	23
Do. do. orbit	13
Do. do. upper extremity	130
Do. do. lower extremity	58
Lead palsy	93
Infantile paralysis	73
Paralysis agitans	17
Progressive muscular atrophy	17
Locomotor ataxia	40
Chorea	41
Scrivener's cramp	3
Sciatica	22
Facial neuralgia	8
Aphonia	16
Amaurosis	19
Deafness	24
Amenorrhœa	14
Hysteria	21
Rheumatism	48
Miscellaneous	165
Unnamed	430
Total	1430

To be continued.



THERMO-ELECTRICITY.

By J. H. SANDY,

Electrician to the Hospital.

In the year 1821 Dr. SEEBECK communicated to the Academy of Berlin the fact that he had succeeded in exciting electricity by the disturbance of the normal temperature of metals. In the prosecution of his experiments he ascertained that if two rods of dissimilar metals be soldered together at their extremities forming a V shape, the two forks being connected by conducting wires to a galvanometer, and the soldered juncture, or apex of the V, be warmed by a spirit lamp, a very perceptible deflection of the magnetic needle took place, demonstrating the presence of a current of electricity in all respects similar to that evolved from a galvanic pile. He also found that a combination of bismuth and antimony gave the best results. From that time to the present this very interesting branch of electrical science has never been lost sight of by electricians, and from time to time "Thermo Piles" have been constructed, and by multiplying the number of elements some minor electrical experiments, such as the decomposition of water and deflection of the magnetic needle, have been performed, but these have been almost solely confined to the lecture table, and all who have attended lectures upon electricity are familiar with the ordinary apparatus used on these occasions, viz.:—a small combination of antimony and bismuth, which, although a very sensitive instrument, is of no other use than to illustrate the relation of heat to electricity.

The greater the variation in temperature of the ends of the rods, the greater the energy of the electricity evolved. If, in the place of the lamp, we substitute a piece of ice, we shall then excite an electric current, although of a much more feeble character and of an opposite polarity; and again, if the lamp be replaced, and we submit the two forks to the ice, the galvanic energy will be vastly increased above our first experiment. To establish these facts it is not necessary to use the elements above mentioned, as all the metals are more or less capable of producing similar results. If a thick piece of copper wire be heated at one end and kept cool at the other the same effect can be produced in a much smaller degree. From this it must not be assumed that a hot wire is a better *conductor* of electricity than a cold one, for the very reverse is the case. If a wire be made red hot its conductivity is reduced almost to that of a non-conductor. A very forcible example of this came under my notice some years since, at the time of the great fire in Tooley Street (being at that time engaged as chief in the Telegraph Department at Brighton). The flames reached the wires making them red hot, and during the time they were in that condition our communication was as completely cut off from London Bridge as if the wires had been actually severed.

Having received a very kind invitation from the Secretary to the Thermo-Electric Generator Company, to form one of a party to look over their works and witness some experiments performed with a Thermo Pile invented by Mons. CHARLES CLAMOND, of Paris, I trust that a brief description of the instrument and its capabilities may not only be interesting, but at the same time show that Thermo-Electricity, after so many years of comparative obscurity, bids fair to rival all other sources, and become of infinite practical value. On arrival, we were led into the "shop," where a number of men are employed exclusively in building up the "piles," and here it is seen in all its parts, and the drawing above gives an excellent idea of the arrangement, and is of interest from the fact that it is printed from an electrotype actually deposited by one of these batteries. The pile is made up of a series of bars formed into rings or "crowns," and laid one over the other after the fashion of the galvanic pile; the bars are composed of a mixture of zinc and antimony, each series being insulated by a kind of talc cemented in with a mixture of asbestos and silicate of soda. Up the centre of the crown is a tube of fireclay and inside that a gas jet, one end of each bar is brought into close proximity without touching the tube.

The following may be taken as some of the results to be obtained from this simple arrangement.

On entering the experimental or show room, we were duly announced by the ringing of a series of electric bells, by a small battery not higher than a pint measure. After it had been explained that these instruments are in use in all the principal scientific institutions of France, Italy and other continental countries, one was attached to a small induction coil and the effects were truly astonishing; sparks were emitted as from a powerful electrical machine, carbon points were then put in circuit and a magnificent electric light given, and water was decomposed, the gases being separated in torrents. We were then shown some large and beautiful specimens of electrotype, copies of chased flowers and scroll work also deposited by this process.

I tried its effects on the muscles and sensation, and found both to resemble the modified form of the Daniel battery in use in the room. A piece of platinum wire was then submitted to the battery and about three inches made red hot, but the Secretary assured me that they made "quantity" combinations which would heat a foot without difficulty.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.

EXAMINATION FOR THE LICENCE (SECOND PART, OR PASS).
DECEMBER, 1875.

MATERIA MEDICA,

AND CHEMISTRY IN ITS APPLICATIONS TO

PATHOLOGY, PHARMACY & TOXICOLOGY.

1. Enumerate the several substances employed as *Emetics*. State the emetic dose of each, and its appropiate use; and describe particularly the action and effects of Ipecacuanha.

2. What substances are used as *Antilithics* or *Lithontriptics*? Mention their particular use and mode of action.

3. Mention the preparations of Hemlock and their doses. Describe the action of the plant, and generally its medicinal uses.

4. Ten grammes of Pure Carbon are burnt in 200 grammes of Air: What changes takes place, and what remains after the combustion? Give the weight and properties of any new substance formed.

5. From Metallic Iron, how can Ferric Chloride (Per chloride of Iron) and Ferrous Sulphate (Protosulphate of Iron) be prepared? State the chemical changes that occur. What

are the properties of these bodies, and by what tests are they recognised?

6. How is Prussic Acid prepared? Give its composition, and the best tests for it. How would you ascertain the strength of a solution of this acid?

MIDWIFERY & THE DISEASES OF WOMEN.

1. A woman was delivered of her twentieth child naturally, with the exception of a slight flooding after, causing a short collapse. On the third day she was seized with pain in lower abdomen, which soon subsided under use of opium; but distension of the abdomen began, and severe vomiting of dark fluid. The pulse on this day was 150 p.m.; the temperature 98° F. There was no delirium.

The next day the vomiting increased; the abdomen had no tenderness, but the form of the intestines could be readily seen on the surface of the slightly tympanic abdomen. The pulse continued at 150 p.m.; the temperature at the same point as on the previous day. By the end of the forty-eighth hour she became colder and livid, and sank in about fifty-six hours after the first seizure of pain. The lochia were free from odour.

It appears that a few days before she was confined, the husband had his third attack of Erysipelas; it was however slight, and he was well enough to be in the room during the delivery.

What would you consider to be the complaint of the woman, and what variations from the usual symtoms do you notice?

2. What is the mechanism of the various Face-Presentations? What is it neccessary to do during the delivery?

3. Describe the methods by which the Placenta is expelled by the Uterus in a normal case.

4. Describe the Natural Terminations of Shoulder-Presentation.

5. Describe Asphyxia in the New-born Infant; how to avert it, and how to treat it.

6. What are the chief forms of Cancer affecting the Uterus? Describe the course and issues of the disease.

MEDICAL ANATOMY AND THE PRINCIPLES AND PRACTICE OF MEDICINE.

1. Describe the anatomical position of the Stomach and Spleen; and give their relations to the surrounding parts, and to the surface of the body.

2. Give a clinical history of an attack of Small Pox occurring (1) in a patient protected by vaccination, and (2) in a patient not so protected. What are the affections that may be mistaken for Small Pox during its early period, and how would you distinguish them from that disease?

3. Give an account of a fatal case of Apoplexy with Hemiplegia, and of the appearances observed after death. Enumerate the morbid conditions that may give rise to Hemiplegia

4. Describe a case of acute Pleuro-Pneumonia affecting the lower lobe of the Lung. State the pathological changes, the general symptoms, and the physical signs, and also the treatment you would adopt. How would you distinguish pleuritic effusion from pneumonic consolidation?

5. Give the symptoms, the course, and the treatment of Acute and Chronic Dysentery. Describe the pathological changes in the Intestine, and state the diseases with which Dysentery may be mistaken.

6. How would you proceed to investigate the cause of an epidemic of Enteric Fever?

Football.

GUY'S *v.* ST. GEORGE'S.

This match, played on our ground at Blackheath after a very fast and pleasant game, resulted in a win for Guy's by 2 goals, to nothing. St. George's, unfortunately, were deprived of one or two of their best men, notably Collins (their captain), and both teams played one short, so that it is impossible to say who will win the cup this season, as we had 3 or 4 men not playing, who will play then. Up to half time, the game was very even, nothing being scored, the half backs on both sides making strenuous efforts to get away. When ends were changed, however, the game bore a very different aspect; the Guy's forwards, playing well together, invariably taking the ball through, being well seconded by the men behind them until it was gradually worked down to the St. George's quarters, when Gray got hold of it, and by a capital run grounded it behind the St. George's goal, the place was entrusted to the same player and a goal was kicked. The ball was again started and the game carried on in neutral ground, but a good rush on the part of Guy's took it down again, and Maclean by a very pretty run obtained a try between the posts; from this Pearson obtained the second goal. The darkness now put a stop to a capital match, a few minutes before time was up. The running of Gray and Maclean and tackling of Finch were excellent, and Welchman played up hard and well forward, and for George's, Ozanne, Hunt and Harris played well. The Teams were :—

Guy's.—Pearson (back), Gray (Capt, three quarter back), Finch, Maclean (half back), Pinching, Rendall, Gilbert, H. Duke, Welchman, Howell, J. C. Wilkinson, Hetley, Scott, Stanley Taylor (forwards).

St. George's.—Creagh (back), Wright (three quarter back), Ozanne, Robinson (half back), Turner (Capt.), Hunt, Margerison, Cowburn, Harris, A. Young, W. Young, Vasey, Davies, Hayman (forwards).

P. F. GILBERT, *Hon. Sec.*

REVIEW.

SURGERY: ITS PRINCIPLES AND PRACTICE.

By T. HOLMES, M.A.,

Surgeon to St. George's Hospital.

The appearance of a new text-book on Surgery will always excite interest in the minds of students preparing for examinations, and a new work by the editor of a bulky system of Surgery will be expected to contain everything recent in the pathology and treatment of surgical diseases—everything, indeed, that a student may require to protect him from the dangers of examinations, and to guide him in the after practice of his profession.

The Surgery just published by SMITH, ELDER & Co., is of uniform size with Gray's Anatomy, and contains nine hundred pages of medium type. In point of size it falls somewhat short of Erichsen's Surgery, which is now published in two volumes. The printing is clear, and, excepting the engravings, the general appearance of the volume is not uninviting.

Before endeavouring to determine the position which this book is likely to take among works upon surgery, we would remark that most text-books, whether upon surgery or collateral sciences, fall readily into two classes: in the one the author, often a man of no very great personal experience, but of extensive acquaintance with the literature of his subject, presents the reader with a careful "résumé" of the opinions of others, but fails somewhat when deducing therefrom his general laws, and often falters when insisting upon a well-recognized and useful mode of treatment; in the other an author of great personal experience puts hurriedly together in his leisure moments a work which embodies what he has himself seen and done, and to this the practitioner will probably prefer to appeal for guidance. Untrue as it may be to suggest that Mr. HOLMES's practical knowledge is small, we are nevertheless inclined to place his book in the former category, for nowhere does he seem to place the patient himself before us, or tell us what to do under special circumstances. We look in vain for information as to the best method of washing out a bladder, although this operation is in several cases recommended; and many similar details of practice most useful to students are altogether omitted. On the other hand, we find much valuable information that can be found in no other book, and there are references to no less than three hundred and fifty authors.

The author commences with a clearly written account of inflammation and repair, in which he does justice to Cohnheim's views and shows himself well acquainted with modern pathology. The temperature in traumatic fever, hectic, erysipelas and tetanus, for the first time in a surgical text-book, is illustrated by thermographic tracings. In speaking of the dressing of wounds, he gives his adhesion to the antiseptic method of Lister, which, he says, secures in many instances perfect immunity from traumatic fever, and is good because it necessitates the personal attention of the surgeon or house surgeon.

In the chapter on hæmorrhage, Guy's men will be surprised to find acupressure and torsion classed together as being alike inferior to the catgut ligature. "I hardly think," he says, "any one could leave a large artery after either acupressure or torsion, with the same comfortable security as he would feel if the vessel were properly tied." It is evident that it will be some time yet before the timidity, which finds expression in ligature, will yield to the principle that it is safer and better never to introduce a foreign body into a wound whenever it can be avoided. Those who read the *Guy's Hospital Reports* will remember how Mr. COOPER FORSTER first wrote enthusiastically in favour of acupressure as superior to the old ligature, and then renounced both these methods of securing vessels for torsion, which has now been employed in almost every operation at Guy's during five or six years. It may be true, as Mr. HOLMES says, that torsion is employed "in few hospitals in London," but it is employed in one, at least, where a very great many operations are performed.

The chapter on injuries to the head adds nothing to Mr. PRESCOTT HEWITT'S essay in the System of Surgery, whilst some things of importance have been omitted.

As might be expected, the chapter devoted to aneurism contains a careful digest of the elaborate lectures recently delivered by the author at the Royal College of Surgeons, and it is well worth reading. In speaking of atheroma, the author follows Dr. MOXON in his belief that this change in an artery is due rather to inflammation than to degeneration.

The chapter upon fractures and dislocations, and those upon diseases of bones and joints strike us as among the most elaborate and best in the book. In speaking of fracture of the thigh in children, the author mentions, without approval, the Guy's method of vertical extension. He recommends instead that the thigh should be enclosed in a leather collar secured by straps. The classic illustrations representing the various methods employed by Sir ASTLEY COOPER for the reduction of dislocations of the hip by means of pulleys, now quite out of date, are introduced and only uselessly encumber the book; but the author has not failed to do full justice to Bigelow's manœuvres for reduction of these dislocations by means of rotatory movements. For fracture of the lower end of the radius he approves of Gordon's splint, but says that other methods are as successful, except when the fracture is impacted. The cause of the difficulty in reducing dislocation of the metacarpo-phalangeal joint of the thumb is fully treated of and illustrated by engravings after Fabbri. It is curious that the author omits entirely to discuss the much vexed question of the respective merits of excision and amputation in joint disease, a question which is of equal interest to the student and practitioner.

In speaking of diseases of the veins, he does not regard hopefully any radical measures for the treatment of varicosity, and quotes in a note the following words of Sir B. BRODIE:—"I have always observed that if I cured one cluster two smaller ones appeared, one on each side, and that ultimately I left the patient no better than I found him."

In the chapter on ulcers, which is founded on Sir JAMES PAGET'S essay in the System of Surgery, students will grieve to find that they are expected to distinguish no less than twenty varieties.

There is an exceedingly clear and succinct account of lithotrity, the value of which is greatly enhanced by the addition of a series of practical hints abstracted from Sir H. THOMPSON'S work.

For the rest, the chapter on diseases of the urinary organs is the least well-informed of any in the book. The author is quite innocent of Cock's operation, described in the Guy's Hospital Reports for 1866, and advocates an operation for opening the urethra from without, which, it is to be hoped, if the difficulties be such as the author declares, few will attempt to follow. After placing the patient in lithotomy position, a grooved staff is carried down to the stricture; the surgeon, with his left forefinger in the rectum, next thrusts the knife into the perinæum. "The staff is then to be exposed by reversing the knife and *dissecting carefully* until its point is reached. Now commences the difficult part of the operation—the attempt to find the posterior part of the urethra *by a dissection* conducted along the course of the canal. * * * Indeed, I have seen, after death from this operation, anatomical evidence that the surgeon had made a kind of artificial urethra, *i.e.*, had *dissected* along the side of the urethra, leaving the stricture on one side very imperfectly, if at all, divided." The italics are ours, and are intended to point out that the author's directions are just such as to lead to the disastrous result he has described. Mr. COCK used to insist—and his opinion is supported by the experience of all his colleagues—that to attempt to reach the urethra by "dissecting carefully" was the very way to miss it, whilst a single deep incision in the proper direction would rarely, if ever, fail to strike the urethra behind the stricture.

Mr. HOLMES is fortunate in having obtained the assistance of so eminent a noculist and so experienced a writer as Mr. BRUDENELL CARTER to contribute the chapter on diseases of the eye, a chapter which adds greatly to the value of the work.

It is a great pity that a book on surgery which contains so much valuable information, as this certainly does, should be illustrated by such atrocious engravings. We fancy we recognize in these drawings the hand of the same artist who has disfigured the later editions of Gray's Anatomy, and we can only hope that in future editions his illustrations may be entirely replaced by the works of others. The shading in some of the drawings of bones more resembles the graining of a door-painter than the soft shadow occasioned by the cutting off of a portion of light from an irregular surface. Nor is the author more fortunate when he selects his illustrations from the works of others. A wood-cut, after Pirrie, supposed to represent a view of the pelvis and perinæum from below, has an absurd resemblance to a bull's head with a candle stuck in the crown; whilst another on the opposite page, intended to illustrate the operation of lithotomy, is absolutely incorrect, it being quite impossible for the surgeon to operate with the legs of his patient placed horizontally, and equally so for the assistant to hold the staff with his knuckles directed towards the patient's head. The description of lithotomy will not, however, interest Guy's men, as the operation with the straight staff, as performed at our hospital, is only incidentally mentioned.

At the end of the book will be found a very comprehensive index, without which no text-book ought ever to appear. There are also marginal references and most useful foot-notes.

In spite of the deficiencies that we have pointed out, we cannot but recommend the book to our fellow students, for we have seldom read a more clearly written and concise account of surgical diseases; and we are confident that a student, who thoroughly masters this book and corrects the practice by study in our wards and in the operating theatre, will not only find himself fully prepared for any professional examination in surgery, but will prove himself, when qualified, to be a highly accomplished practitioner.

AIDS TO ANATOMY.

By GEORGE BROWN, M.R.C.S., L.S.A.

LONDON: BALLIERE TINDALL & COX.

This little book which has been sent to us is a reprint in a collected form of those notes on Anatomy which have appeared from time to time in the pages of the *Students' Journal*, and are therefore known probably to many of our readers already. The first part of the book consists of the anatomy of regions, the structures displayed on removal of certain muscles, the contents and relations of parts in some of the large cavities, as the Thorax, and these are for the most part all to be found in the ordinary text books, but arrangement and classification is more convenient than in some. The latter part is devoted to a short description of the Cranial Nerves, their origin, course and distribution, this resembles much the description given in the books, but being short can soon be gone over to refresh the memory, when a "Gray" is not at hand. To the Student of Anatomy it may be of some service, for although the subjects treated of are few, yet many of them are most important, and being tabulated can perhaps more easily be learnt, although they should not be in this way to the exclusion of knowledge obtained by dissecting. The book is well printed and neatly got up, and of such a size as to be no encumbrance in the pocket.

CHRISTMAS IN THE WARDS.

Christmas came round this year with its usual festivities, and passed off in a pleasant and joyous manner.

There was the dinner of roast beef and plum pudding, provided by the Governors of the Hospital, and the dessert, supplied by the students; there were besides pipes and tobacco for the smokers, and toys for the children.

The wards were as tastefully decorated as circumstances allowed, and did great credit to those who worked so hard to make them look as seasonable as possible, and to render them a fit abode for the "royal old monarch" during his short but merry reign.

The Clinical Wards are pretty in themselves, yet on visiting them on Christmas morning they presented a very pleasant sight, especially the female side, where many of the convalescent patients worked very hard to make their ward look beautiful.

In Philip the decorations were very neat, and Stephen was also nicely decorated, the holly and other evergreens being tastefully arranged. The wish of the season, "A Happy Christmas," was worked in laurel leaves and suspended across one of the divisions.

Bright looked exceedingly nice, the evergreens, to which were added a few artificial roses, were prettily placed. Over either fire-place was seen, in letters formed by holly berries on a green ground of laurel leaves, the words "A Merry Christmas."

Mary presented a pretty sight, and each of the four divisions had a style of its own. The spaces over the fire-places were occupied with a beautiful specimen of decorative art, and on either side were placed a number of appropriate texts and wishes executed in different kinds of foliage.

In Addison the style of decoration was remarkable for its general neatness and excellent taste. Over the entrances into the ward were long wreaths which were fastened at each end so as to hang down and form an angle opposite the centre of the door, to which was attached a bunch of mistletoe. At the end of the ward, on a pink ground surrounded by everlasting flowers, were the letters "I.H.S." in gold; there were also stars, triangles, and crosses made of green leaves were to be seen in various parts.

Ruth and Barnabas were neatly and tastefully decorated.

On the Surgical side the wards showed up to great advantage.

In Cornelius, besides the decorations around the doors, windows, bed rails and gas lights which looked exceedingly nice, the poles used for Hodgen's splints were utilized for making the ward look more beautiful by winding round them wreaths of evergreens.

Lydia Ward looked particularly homely with its neat decorations and large christmas tree, which was hung with a goodly variety of bonbons and play-things for the children, and on a side table was spread out the dessert, which consisted of sweets and cakes and fruits and a supply of British wines. Running round the ward in separate letters over each bed was the device "A Merry Christmas to you all."

Job Ward presented a light and cheerful appearance due to the style of decoration, which differed somewhat from that noticed in most of the other wards. Festoons were carried round the ward and attached to the chains by which the head rails are suspended. For the benefit of the younger occupants of the ward there was a christmas-tree, which was loaded, not so much with sweets and toys, as with articles which will be of service to them when they have left the ward.

Martha and Lazarus were also very tastefully decorated. On entering the former we noticed, at the end opposite the door, a large banner with the words "Welcome to Mr. DURHAM."

In Charity were several large banners, on one, which was worked with green leaves on a white ground and hung in the centre of the ward, were the words "Long live Mr. COOPER FORSTER," on a second was the Hospital motto "Dare Quam Accipere," and on a third, which was placed at the end, "A Merry Christmas." But the prettiest part of the decorations here was the small wreath which was placed over each of the prescription boards.

In Luke we fancied we noticed the practised hand. Over doorway, beds and windows and along the whole length of the walls were fastened long wreaths of evergreens and holly berries beautifully and tastefully arranged; above the windows at the end of the front ward was placed an exceedingly beautiful piece of work:—"A Happy Christmas to you all" on a red ground with letters formed by small leaves and yellow everlasting flowers. But perhaps the design which attracted most attention and afforded greatest amusement was one, the work of one of the dressers, entitled "The Actual Cautery." It is evidently Christmas eve and Dr. Clown has just returned home with a fine goose (part of which can be seen hanging out of the pocket of his nether garments) which he is about to prepare for his Christmas dinner, and is by no means desirous of seeing patients. Mr. Pantaloon who wishes to be put right before the Christmas festivities, unfortunately, for himself, calls upon the doctor, who, having his mind engaged with the affairs of the kitchen, treats his patient surgically by applying to him a red hot poker. However, the prettiest and most elegant ornament was a large cross with the letters "I.H.S.," which were worked on a red ground with the white everlasting flowers and holly berries, and surrounded with a wreath of green leaves.

Dorcas and Naaman were decorated, as were also Patience and Samaritan.

Those patients who were well enough to attend service on Christmas morning had the opportunity of seeing an exceedingly pretty specimen of church decoration, and the highest praise is due to those who were engaged in ornamenting the chapel.

Effective decoration, though a work of art and taste, unfortunately also requires time for its execution. All in the wards worked their best, and if any one was better off than another it was due, we believe, to extraneous assistance, and in one case this was specially noticeable. We believe Christmas, 1875, at Guy's, was a happy one for many, if not, it was not the fault of those who did their best to minister to the comfort of its inmates.

MEDICAL DUTIES.

Mr. D. C. DAVIDSON, the Senior House-Surgeon of the Birkenhead Borough Hospital, has resigned his appointment, in consequence of his having been required to keep the Matron's accounts.

Mr. J. F. BLAKE in a letter to the *Lancet* states that on the occasion of his candidature for the appointment of "Resident Medical Officer" to the Wandsworth and Clapham Union, he was much struck on being asked by the Chairman as to whether he was *conversant with the management of a Laundry?*

CLINICAL THERMOMETERS.

With clear black burnt-in divisions, which cannot be effaced or rubbed out.

THE STANDARD CLINICAL THERMOMETER, by which all others may be tested at any part of their graduations 0 10 6
THE HOSPITAL CLINICAL THERMOMETER, clear, distinct, and correct 0 6 6
THE PATENT CLINICAL THERMOMETER, with Indestructible Index, which cannot be shaken into the bulb 0 15 0
Kew Certificates from the Royal Kew Observatory may be had with any of the above at 1/6 extra.
THE IMPROVED PATENT PORTABLE SPIROMETER 5 10 0

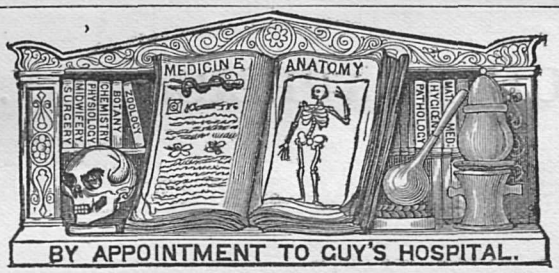
L. CASELLA, 147, Holborn Bars, London, E.C.

LIBERAL TERMS ALLOWED TO AGENTS AND ON WHOLESALE ORDERS.

3d. IN THE 1s.

DISCOUNT OFF

MEDICAL BOOKS.



BY APPOINTMENT TO GUY'S HOSPITAL.

MEDICAL BOOKS BOUGHT OR TAKEN IN EXCHANGE.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

A Set of Quain & Wilson's Anatomical Plates—Coloured—(Published £10 10s.) For Sale Cheap.

TO STUDENTS.—FIRST-CLASS SURGICAL INSTRUMENTS.

The CHEAPEST HOUSE in LONDON is C. BAKER'S, 244 & 245, High Holborn.

Every article is warranted of the best manufacture.

STETHOSCOPES, every variety, from 2s. each.
DISSECTING CASES, in Ivory Handles, from 16s. 6d. the set.
DISSECTING CASES, in Ebony Handles, from 10s. 6d. the set.
POCKET DRESSING CASES, from 15s. 6d.
MIDWIFERY FORCEPS, 10s. 6d.
STOMACH-PUMP with ENEMA combined, 21s.
POCKET MIDWIFERY CASE, 8s. 6d.
OPHTHALMOSCOPES, for the Pocket, from 6s. 6d.
LIEBREICH'S, ditto, 14s. 6d.
LARYNGOSCOPE, complete in Case, from 25s.
TOOTH FORCEPS, Tomes', all kinds, 5s. 6d. each.
Ditto Clendon's, ditto, 4s. each.
FERGUSSON'S SPECULA, all kinds, 3s. each.
SILVER-PLATED CATHETERS, from 1s. 9d.
HYPODERMIC SYRINGES, from 6s. 6d.
URINOMETERS, from 2s. 6d.

The Self-Registering Clinical Thermometer,

In Case, complete, 3 inch, 5 inch, or 6 inch, at 6s. each.

Catalogues free by post.—Second-hand Surgical Instruments of all kinds kept in stock.

STUDENTS' MICROSCOPES, £3 3s.—C. BAKER'S Students' Microscopes have all the latest improvements, with object-glasses which will define the most delicate pathological structure. Complete, in case, £3 3s.
INJECTED and other PATHOLOGICAL OBJECTS, from 1s. 3d. each. MATERIALS and APPARATUS for MOUNTING of every kind.
Catalogues free by post. Observe—244 & 245, HIGH HOLBORN.

MICROSCOPES AND APPARATUS OF EVERY DESCRIPTION.

GLASS SLIPS, COVERING GLASS, CLIPS, LABELS, OBJECT BOXES AND CABINETS, DROPPING TUBES, MOUNTING FLUIDS, &c., &c.

CLINICAL THERMOMETERS 7s. 6d. & 9s.

IN METAL CASES TO PROPEL AS PENCIL, 15s.

STANLEY, Optician,

13, RAILWAY APPROACH,

LONDON BRIDGE, S.E.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine, and Surgery.

NEW SERIES.—No. 2. FEBRUARY, 1876. SIXPENCE.

CONTENTS.

Clinical Medicine	15	Physical Society	21
Clnical Surgery	16	Electrifying Room	22
Surgical Cases	16	Surgical Wards	23
Chorea in relation to Insanity	19	Medical Wards	23
Statistics of Lying-in Charity	19	Royal College of Surgeons of England	25
General	19	Apothecaries' Hall	25
Leading Articles	20	Athletics	26

TO ADVERTISERS.

The GAZETTE will be published for the present on the second Saturday in each month. Notice of change in Advertisements should be given one week before publication.

HOLMES'S PRINCIPLES & PRACTICE OF SURGERY.

JUST PUBLISHED, WITH UPWARDS OF 400 ILLUSTRATIONS. 8vo, 30/-

SURGERY: ITS PRINCIPLES AND PRACTICE. BY TIMOTHY HOLMES, F.R.C.S., Surgeon to St. George's Hospital.

London:—SMITH, ELDER & Co., 15, Waterloo Place.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

The Presidents of the Physical Society acknowledge with thanks the following donations to the "Gazette":—

Dr. F. W. PAVY ...	...	...	£1 1s.
C. S. Ticehurst, Esq.	...	...	£1 1s.

We cannot acknowledge all the Subscribers to this issue. Each will please consider the receipt of the "Gazette" sufficient for this purpose.

TERMS OF SUBSCRIPTION.

The "Gazeite" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to H. DAVY, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Medicine.

Dr. PAVY took up a case of delirium tremens. The patient, about 25 years of age, his habits have been intemperate from childhood; the last few years has drunk a large quantity of beer and spirits. He was once in the Westminster Workhouse for 9 days, where he was taken insensible, having been drinking very freely.

He was admitted here on the 30th of December, and said that he had been more or less drunk since the 27th. He was in a restless state, looked wild, clenched his hands, said he had "bad feelings." He got quietly into bed and was strapped down. He apparently had slight delusions, a pale flabby tongue, face flushed, skin clammy, pulse frequent, he shivered now and then, had general tremors. The patient seemed to be afraid of something, and on inquiries being pushed he became excited. In these cases it is most important to ascertain whether delirium tremens is really present. In such as the above we may easily make enquiries about previous habits, &c., but in others we must be very careful, chiefly in the case of females, our conclusions must then be drawn from the symptoms. A female may come in in a sleepless state, complains of dreams during the night, waking up in a fright, tongue tremulous, &c. Ask if she has a bad appetite in the morning, or has retching and the rejection of glairy mucus at that time; these symptoms are due to chronic gastritis, which alcohol often gives rise to, and we may fairly suspect that her symptoms are due to alcoholism.

It is important not to mistake the nature of the delirium, for persons suffering from injuries often get a delirium resembling that of delirium tremens. Dr. PAVY mentioned a case in which the importance of this was seen, in which a man had delirium following an injury, and was in danger of losing his situation on account of its being mistaken for that of delirium tremens.

In the treatment of delirium tremens the object is to quiet the patient and to get him to sleep. Opium used to be given with porter. Stimulants should not be left off suddenly, but a small quantity should be given. Chloral is the best sedative, and may be given in doses of 15 to 25 grains every 3 or 4 hours. Digitalis in large doses has been proposed as a remedy, but it is rather a dangerous one, and is thought to have led to death in some cases in which it has been employed.

The next case was a very instructive one of a man, aged 42, who gave a good family history, and stated that he had himself been a healthy man until 2 years ago, he then caught cold and became weak and ill and has remained so ever since; he has been a steady man. He has been attending among the out-patients for consumption, though he has been keeping to his work up to December 24th. A week before christmas spat up blood, and has continued to do so up to date of admission. On January 4th he lost the power of speech and regained it and lost it alternately up to the 7th, when he completely lost it. He was then quite delirious, had no paralysis; but, becoming worse, he was brought into the Hospital. On admission, January 8th, he lies in a semi-conscious condition, groaning, and not answering when spoken to, though he opens his mouth when asked to put out his tongue. There is right facial paralysis, aphasia, and right hemiplegia, also the sensation of the right arm is impaired, breathing almost stertorous, swallows badly.

January 9th.—Seems unconscious, passes his urine and fæces under him, paralysis of right arm less.

10th.—Less drowsy, rambles, right arm now unaffected, both legs extended, reflex action in legs, left arm lies motionless, the right side of the chest gives evidence of disease of the lungs, urine slightly albuminous, temperature 100·6°.

11th.—Evidence of paralysis of left arm.

12th.—Less drowsy, cheeks much flushed, very little paralysis of left arm, temperature 98·6°.

13th.—Had a bad night, lies semi-comatose, tongue and lips dry, obstinate constipation has existed all along, died in the afternoon.

What condition might one expect to find in such a case as this? There was the sudden supervention of cerebral symptoms upon phthisis, but not a sudden fit like that of apoplexy, there was delirium, aphasia, paralysis of different parts, facial paralysis, &c. It was evident the brain was to be looked to for these prominent symptoms. Had there been a clot of blood in the brain the symptoms would have been continuous, and there would have been loss of power and coma would have supervened. There are two forms of apoplexy, that in which the symptoms become worse, and that in which there is slight repair and improvement. It might have been uræmia following on albuminuria. The albumen, however, in the urine was small in quantity; the small amount of albumen *may* indicate that the kidneys are much deteriorated in function, and then uræmia might come on, but in this case there was delirium to a marked extent which does not occur in uræmia. Then it might be embolism, but the heart was sound, and further there would not have been the *variety* which was present in the symptoms of this case. Dr. PAVY said that to his mind the case looked very much like tubercle in the brain; there was the tubercular disease in the lung and a transference of the symptoms to other parts of the body might be looked for. The symptoms would not be due to the tubercles themselves, but to the hyperæmia around them.

At the P.M. examination the lung was found full of tubercle, there was also tubercle in the brain and spinal cord, with ulceration of the intestine. Thus the diagnosis was confirmed, and this instructive case cleared up.

Clinical Surgery.

EPITHELIOMA OF THE TONGUE.

Mr. DURHAM commenced his lecture by calling attention to the frequency of the occurrence of cancer of the tongue, this organ being next behind the breast, according to Sir J. PAGET, in the frequency with which it is attacked with cancer. Mr. DURHAM said he had no doubt that the uterus was really most frequently affected, but he was giving Sir J. PAGET'S statistics, which did not take in the uterus in his analysis of the relative frequency with which various organs of the body were affected out of 500 cases of cancer.

He did not go into the question as to the purely local or purely constitutional origin of cancer, but he held that the first manifestation of cancer in a patient was purely local, often traceable to a simple cause, as in cases of cancer of the tongue or lip to the irritation caused by a jagged tooth or unwaxed pipe, and possibly in the above case to purely manual violence, there being a history of violent compression of the throat some time previously.

He impressed upon all the great importance of careful diagnosis and treatment in cases of suspicious swellings in the tongue, particularly if there were a doubt as to syphilis. There were several points of difference between a malignant and a syphilitic growth in the tongue:—(1) The pain—In a malignant growth of a gnawing burning character, constant and at times very severe; not so in a syphilitic one. (2) The rate of growth—in a malignant growth rapid, in syphilitic slow. (3) The cause. (4) The appearance—In a malignant ulceration the edge is hard and eroded, and the form more or less circular as a rule; in syphilis oval or elongated with a hard base. He mentioned also some other points of diagnosis. A few days' treatment with Iodide of Potassium would sometimes decide the question, doing no harm to the patient.

Where, however, the diagnosis was certain of the malignant nature of the growth, the treatment must be both energetic and speedy; mild caustics were frequently used. Mr. DURHAM condemned them; he looked upon all cancers of the tongue or other parts as enemies only to be extirpated, it would therefore be bad policy only to irritate them, and this the application of caustics often did. But if the growth were destroyed, how should it be done? Mr. DURHAM was in favour of the knife where its course could be plainly seen, but if its use would involve working in the dark, as it sometimes would in tongue cases, then there were three other means to be employed:—

1st.—The Ligature.

2nd.—The Chain Ecraseur.

3rd.—The Galvanic Cautery or Ecraseur.

The first of these was very painful though efficient, he did not therefore strongly advocate it; the second was good, he had often used it himself with good result, but the third he thought the best.

He then proceeded to describe its use, going at the same time seriatim into the steps of the operation as described in one of the following surgical cases, remarking on the favourable character of this patient for the operation, and the good result at present obtained, which it might be hoped was lasting.

A growth removed from the back of a man's hand was shewn. This had been thought to be a papilloma, which had become epitheliomatous; but, on examination after removal, no cells of that type were to be discovered, and it had the appearance, on section, of a number of little horns packed closely together.

Surgical Cases.

OPERATION FOR REMOVAL OF TONGUE.

Mr. DURHAM, on the 21st, operated for epithelioma of the tongue. The patient was a healthy looking man, aged 42. The inconvenience in swallowing and pain were considerable, and the growth was felt extending nearly as far back as the epiglottis, it being at first doubtful whether this structure was not involved. The growth had been rapid.

Chloroform was administered first by the usual inhaler and afterwards through the nostrils by the double tube apparatus of Junka. An incision was then made in the median line from the lip down to nearly the hyoid bone, there was a fair amount of hæmorrhage at this stage, but the breathing of the patient was improved by turning him well over on his side, and sponging out his mouth at intervals. The jaw was then sawn through at the symphysis, the two halves forcibly separated, and the loop of the galvanic ecraseur passed well back behind the growth, which was found not to involve the epiglottis. A small portion of the back of the tongue appeared healthy. The loop was slowly contracted, a comparatively low degree of heat being used, and gentle traction forwards maintained. The tongue was then removed with the sub-lingual muscles, the mylo-hyoid apparently remaining, there was little hæmorrhage. The jaw being re-united by silvered wire, the soft parts were brought together by sutures and strapping, and the patient removed to bed. He has since experienced great relief, he can now swallow liquid food, has had one slight attack of bleeding.

The wire was removed from the jaw on January 31st. This was done partly on account of the silvering having worn off.

Two cases of recurrent hæmorrhage from wounds of the hand, treated by division of the brachial artery in its continuity and torsion of the divided ends (under the care of Mr. BRYANT).

A boy, aged 11, was brought to the surgery for secondary hæmorrhage in the palm of the hand. 5 weeks previously he fell on some broken glass and cut his palm. There was no bleeding at the time of the accident, nor was there any till 2 days before he came up, when, while on his way to school, hæmorrhage suddenly took place, almost a pint of blood being lost, according to his account. He was taken to a surgeon, who applied cork pads over the radial and ulnar arteries, Bleeding, however, recurred the next day, when he was brought here. On examination, there were two small wounds in a sloughing condition, one at the bend of the wrist, and the other about an inch lower down. He was taken in, a graduated compress applied to the palm and the arm kept raised. On the second day, there being a great deal of swelling and offensive discharge, the compress was taken off, and a pad of wet lint applied. In the night hæmorrhage occured again to a great extent, the boy when seen being quite pulseless; this was arrested by pressure on the brachial artery. Under the circumstances, Mr. BRYANT cut down upon the brachial artery in the middle of the arm, and, having found the vessel, held it between two pair of torsion forceps, divided it with a pair of scissors, and twisted both ends; the edges of the wound were brought together by strapping, and the arm slung in a Hodgen's splint modified for the arm. Most of the wound healed by primary union, those in the hand took an healing action, the boy improved rapidly in health and left well in 3 weeks.

This, we believe, is the first time that an artery in its continuity has been cut down upon, divided and twisted. The result is most successful; and it is claimed for the operation that all danger of secondary hæmorrhage, which even the catgut ligature is unable to avoid, is done away with, as well to a great extent that of pyæmia, the wound being placed under more favourable circumstances for primary union to take place.

On December 2nd, a man, aged 32, wounded the back of his hand with a chisel, the wound was in the space between the thumb and forefinger, its upper end being bounded by the snuff box, it bled considerably at the time and a bleeding vessel was ligatured by the surgeon who attended him.

On December 8th, hæmorrhage from the wound took place again, and he was admitted on that day into the hospital. At that time the ligature, applied 6 days before, was still attached, the wound looking sloughy pressure sufficed to control the hæmorrhage, and the patient was placed in bed with the hand and arm raised. Hæmorrhage recurred slightly a day or two after this, and again rather severely on the 14th; this time an armed needle was passed under the bleeding point, and the vessel tied firmly. After this all seemed to be going on well until the 18th, when, on taking off the dressings, fresh hæmorrhage from a good sized vessel occurred. Mr. BRYANT was sent for, while a tourniquet was placed on the brachial artery and pressure was applied to the wound. Mr. BRYANT considered that the wisest course was to ligature the brachial, as the wounded vessel was evidently of a tolerable size; it seemed, indeed, that it might be the radial itself, at the spot where it passes between the heads of the first dorsal interosseous muscle into the palm of the hand, and to search for it in the inflamed and sloughing hand would be a serious matter, and accordingly the patient was put under chloroform, and Mr. BRYANT cut down on the course of the brachial artery in the middle of the arm, and, instead of placing a ligature round it, he adopted the course followed in the preceding case, and took up the vessel with two pairs of torsion forceps, divided it between them and twisted the two ends. The lower end emitted one jet of blood when the forceps were removed, but no more. After the operation the patient progressed favourably, the wound in the hand healing well, and the operation wound uniting as well as could be expected in a patient who had lost so much blood and who was naturally unhealthy. Convalesence has been retarded by a mild attack of erysipelas, but the man is now fairly convalescent.

This is the second case in which the above method of treatment has been pursued with good success.

TALIPES, EQUINO-VARUS.

Operation by Mr. DAVIES COLLEY.

E. H., æt. 12, Luke Ward, under Mr. COOPER FORSTER, May 8th, 1875. Patient is a healthy boy, has had Talipes from birth. When 4 years old some tendons were divided without benefit.

On admission, both feet are greatly deformed, the inner and anterior part of each being so drawn up that patient walks completely on the outer side. He stands with his legs about a foot and a half apart, and waddles when he walks. Over the external cuneiform bones are large callosities, that on the right foot now suppurating. The case was treated by application of splints, and afterwards by subcutaneous division of tendons—*i.e.*, the tendo achillis, tibialis posticus and inner division of the plantar fascia—without any good result.

On October 15th, Mr. DAVIES COLLEY, under the carbolic spray, made a longitudinal incision, 3 inches long, along the outer side of the foot from the external tuberosity of the os calcis; from the centre of this an incision vertically upwards for about 2 inches. Having reflected the flaps on each side he removed:—1st. The whole of the cuboid bone, and then cut off with a knife pieces of the os calcis, astragalus, scaphoid, and nearly the whole of the cuneiform bones.

The wound was dressed antiseptically and a splint was applied.

November 1st, patient has been doing very well. A splint of Mr. COLLEY'S is applied. It consists of a back splint bandaged to the leg, from the lower part of which a bar passes horizontally across its length; from each end of this a bar ascends vertically. The leg having been bandaged to the splint so that the horizontal bar is two or three inches above the foot. The foot having been dressed, is so fastened by strapping to the vertical bars, that it is kept in good position. Many slight alterations in the way in which the strapping is fastened were adopted as Mr. COLLEY thought fit.

On November 22nd, the foot has been got into remarkably good position, so that in standing the patient will rest on the ball of the little and great toes and the heel.

On November 23rd, the other foot was operated on in exactly a similar manner, and since the child has done remarkably well and the feet are in good position.

January 21st, patient has been doing well ever since. A new splint was used for each foot for about a month. This consisted of a short back splint extending from an inch above the ankle to the bend of the knee; from the lower end of this a piece of wire passed downwards at an acute angle and opposite the foot was bent on itself so as to be vertical. The foot, after being dressed, was bandaged to the vertical piece and thus kept straight.

February 3rd.—Both the splints were left off on the 31st, and the feet are now dressed only with lint and Unct. Zinci and bandages. There is perfect movement in all the toes, and considerable voluntary movement in each of the ankles; while they can be moved with the hand to a yet greater extent. Each foot from the heel to the end of the great toe is 7 inches. Patient can walk easily holding on to the back of the wheel chair, and also for some distance without any aid at all. Feet whilst walking are flat on the ground, but he does not move the ankle.

From the beginning to the end of this case there has not been an unfavourable symptom, and the foot is now flat, so that in standing he rests on the heel and ball of the little and great toe.

FACIAL CARBUNCLE.—E. B., 23, was admitted on 29th December, with a hard, red and painful swelling on the right side of her nose. 3 weeks before she had suffered from in-growing toe-nail followed by lymphatic lines up the leg and lumps in the groin. This had disappeared and she had been pretty well, till the day before her admission, when she complained of her nose. She was wandering in the evening, with with a temperature of 103°. Next day the swelling had spread considerably over the right malar bone, and several small vesicles were scattered over the surface of the swelling; these in a few hours became pustular, and during the night ran together. The patient died on the morning of the 31st. P.M.—The right facial bone contained a large quantity of pus, but there was none in the sinuses of the dura mater, as described by Drs. Wilks and Moxon. Mr. COOPER FORSTER (whose the case was) has described in the report a very similar case. A feature unnoticed in other cases was the existence of small abscesses in the skin all over the body, P.M. sloughing was noticed, which extended beneath the cervical fascia, especially on the left side of the neck.

MILK CYST.—E. A., 29, married, 5 children, ot whom the youngest was 13 months old. Both breasts have been used equally in suckling. About 12 months since she noticed a lump in her right one, which at first was very small, but has increased in size rapidly lately, and is now the size and shape of a walnut. It feels hard, but there is a slight sensation of fluctuation, freely moveable, is at the upper border of the mammary gland and connected with it. Various opinions were expressed as to the nature, most being in favour of adenocele, but some thought it a carcinoma. Mr. FORSTER expressed his opinion that it was cystic and suggested it might be a galactocele. A grooved needle was introduced and milk ran out; a free incision was subsequently made and the cyst evacuated. Another case of cyst in the breast is in Martha Ward. The patient is single, æt. 46, and has noticed the lump but a few months. This case was chiefly thought to be scirrhus in a very early stage, as there was no adherence, but it contained a limpid fluid of a yellowish colour.

ACUTE NECROSIS OF FEMUR—PYÆMIA.—A. B., 16, a healthy girl, fell in the street on November 28th, and hurt her right leg; she was unable to walk afterwards, and was brought to the Hospital on December 1st. On admission, there was a swelling of the lower end of the humerus with a pus in the right knee, left ankle and right shoulder joints, there was also acute pericarditis and the temperature was 102°. Large quantities of sherry (as much as 2 pints in 24 hours) were given for a fortnight, but bed-sores soon formed on every spot where there was the slightest pressure, and the girl died of exhaustion on December 27th. P:M.—In and about the right hip there was acute suppuration, the ligamentum teres gone and the articular cartilage eroded. The lower half of the shaft of the femur was dead and surrounded by pus, but necrosis had stopped at the epiphysis and not extended into the joint; suppuration round, but not in the left hip; the left fibula was also necrosed. Abscesses scattered throughout both lungs, chiefly at the base, but there was one large one at the right apex. Acute pericarditis with half a pint of fluid in the pericardium. A patch of pericardial adhesion (size of a florin) at base of left ventricle posteriorly and at apex anteriorly; beneath these spots and in the substance of the muscle of the heart were small points of suppuration.

RUPTURED BOWEL.—E. H., æt. 57, was run over the abdomen by the front wheel of a van containing 4 cwt., at 5 p.m. on December 23rd. She was brought

in in a state of collapse, extreme pallor of the face, small pulse, 140, flattened and tender abdomen. She was given nothing but ice, save 10 drops of laudanum to ease the pain in her abdomen, and she died in 8 hours after the accident. P.M.—The bowel was broken completely across at the end of the duodenum, the mesentery torn in several places, some blood in the abdominal cavity. Early peritonitis was present, showing how rapidly apparent inflammation of that membrane may arise.

CHOREA IN RELATION TO INSANITY.

BY W. C. HILLS, M.D.,
Medical Superintendent to the Norfolk County Asylum.

I have selected this subject because it is one upon which 21 years' asylum experience enables me to offer a few remarks that may prove of real service to those who are now students, but who will one day have the responsibility of deciding whether a patient is sane or insane, fit to be left with his friends in the world, or to be confined within the walls of an asylum. Some of our most valuable lessons in life, and especially in medical life, are those we learn from our own and others errors of judgment and mistakes in practice. Your readers would no doubt regard as very improbable, if not impossible, such an error as that of mistaking and treating a choreic patient for a lunatic, and yet this has actually occurred four times in my experience, three choreic boys, æt between 9 and 14, and one woman, æt 60, having been certified as insane and sent into a County Asylum! These four were cases of well marked chorea, and yet the medical man in filling up the forms, under that most important heading "symptoms indicating insanity observed by them" actually inserted the very symptoms that constitute the definition of Chorea; "extreme restlessness, inability to express himself, constant gesticulation, frequently breaks cups and saucers, great irritability, slovenliness, noisiness, insomnia," and so forth, were really set down as signs and proofs of insanity!!! It is true we find all these in Sub-acute Mania, but they, *per se*, would not establish a case of Sub-acute Mania, they would be a definition of it, minus its *differentia*, viz., false perceptions, hallucinations, incoherence, delirium, &c. In Copland's Dictionary it is stated that "in severe and protracted cases of Chorea the countenance conveys the idea of imbecility or fatuity, when the disease is fully formed the mind is often harassed by various concealed mental impressions and ideas; also the emotions or desires are variously excited without any sufficient or apparent cause."

Still, on reviewing the facts of the four cases referred to, I do not think that any medical man ought to have mistaken them for cases of insanity; they presented all the phenomena characteristic of chorea, the involuntary twitchings of the facial and other muscles, &c., &c., together with the absence of the ordinary indications of insanity, such as wilful inconsistent actions, antipathy to relations, incoherence, suicidal proclivities and so forth. One of the three boys died from exhaustion produced by the violent and incessant muscular contractions which rendered deglutition impossible and resisted all remedies. The other three cases progressed favourably, and recovered under the treatment I had so often seen to be successful at my old school, Guy's, viz., that of Sulphate of Zinc, given in doses of 1 grain, and gradually increased till 5 to 10 were tolerated without sickness.

Chorea does, however, sometimes terminate in confirmed insanity, and I have such a case now under my care; the choreic symptoms appeared long before those of mental aberration. When admitted the patient had delirium, and auditory hallucinations, and now, although her mental condition has improved, her choreic symptoms continue unrelieved in spite of all remedies.

STATISTICS OF LYING-IN CHARITY FOR JANUARY, 1876.

Women attended, 203; single births, 197; dual births, 4; abortions, 2.

Number of children born, 205; males alive, 95; males dead, 1; females alive, 107; females dead, 2.

Presentations: vertex, 193; Breech, 11; Face, 1.

Operations: Forceps, 2.

Women in 1st confinement,	31	Women in 2nd confinement,	24				
„ 3rd „	32	„ 4th „	20				
„ 5th „	18	„ 6th „	26				
„ 7th „	17	„ 8th „	12				
„ 9th „	10	„ 10th „	5				
„ 11th „	6	„ 12th „	1				
„ 13th „	1						

C. J. SYMONDS,
Junior for January

General.

RESIDENTS FOR FEBRUARY.

House Physicians	Messrs. Rendall and Hobson
House Surgeon	Mr. Clarke.
Senior Obstetric	Mr. Symonds.
Junior Obstetric	Mr. Carrington.
Junior House Surgeon ...	Mr. A. H. Jones.
Junior House Physician ...	Mr. H. N. Smith.

DRESSERS IN RESIDENCE DURING FEBRUARY.

Mr. A. Finch (Mr. Cooper Foster), Mr. A. W. Green (Mr. Bryant), Mr. Welchman (Mr. Durham), Mr. Besan (Mr. Howse), Mr. J. W. Bull (Mr. Cooper Foster).

Mr. P. J. JACKSON has been appointed House Surgeon to the Surrey Dispensary.

Mr. SYDNEY HOWARD VINES, (B. Sc. Lond.), Guy's student, was placed first in the Natural Science Tripos at Cambridge.

Mr. GASCOYNE of St. Mary's, one of the new examiners at the College, died rather suddenly after examining for only two days. Mr. HULKE is spoken of as his successor.

During January in the Surgical Wards Chloroform was administered 84 times, mixture 5 times, and ether once. No deaths.

GUY'S HOSPITAL GAZETTE, *FEBRUARY*, 1876.

"WHEN doctors disagree, who shall decide," is an old saying, and seems to intimate but a possibility, but does there exist a class of men whose opinions are in less accord with one another? Throughout the whole course of the medical student's career in struggling to obtain, in the short time at his disposal, some knowledge of the landmarks of his "science and art," he finds no obstacles so great as the conflicting opinions of his teachers. Chemistry can by no means be excepted from this statement. Physiology consists in great measure in weighing probabilities, and sifting the evidence on one side or the other. Not even Anatomy is without doubt, whilst a given pupil's practice of Medicine or Surgery depends in the main upon his teacher.

A few years ago a writer in Holmes' Surgery in concluding an article upon abdominal section in certain cases sums up strongly against it, and says it is unjustifiable, yet a little later an equally eminent surgeon reverses this statement, and quoted facts to prove his own. At Guy's we are taught, and see demonstrated, the inestimable value of torsion of arteries, yet where else save at our own school do we find its advocates. At other hospitals it is next to unknown and treated as a mode of practice of little value, and quite secondary to the ligature, whilst in another place we are told that acupressure is *the* infallible hæmostatic. The writer of a recent work, which might be expected to unfold the present condition of surgical science, makes no mention of Mr. COCK'S operation of opening the urethra, whilst the same author is called to task in the *Lancet* by a London surgeon for condemning, upon insufficient grounds, a practice of which the latter is the chief advocate, and about which we have had a voluminous correspondence extending over some weeks.

Time and work are the only factors that can clear up the uncertainties of science, but the remedy for our ignorance of the practice of others is with ourselves, and those who have the management of the London Schools. We ought not to be so narrow-minded and exclusive as to pay attention and give belief only to the teaching of our own professors, and *they* might help us by an arrangement by which the students of one hospital might attends the wards of any other, not as a favour, but as a right.

We think indeed our GAZETTE may be some means towards this end, and we hope Guy's men will help us as far as we are able to go in the attainment of our object.

THE new rule for the Primary Examination at the College, devoting an extra ten minutes to *viva voce* examination in physiology, first came into force last month.

Formerly, no doubt, there were some who passed the examination without receiving any questions in physiology at the *viva voce*, there being no time specially set apart for that purpose. Now, however, every candidate must be separately examined in this subject. This change seems the beginning of the more complete separation of the two subjects,—anatomy and physiology—and, in time, the necessity, no doubt, will be seen of setting a separate paper in the latter subject.

To those preparing for the Primary a more critical notice of the style of the questions may be necessary. Taking the liver as a subject; its structure was first gone into, *i.e.*, Glisson's capsule was traced, the minute structure of the lobules, with the distribution of the vessels, and the course of the circulation were asked. The microscopical characters of the liver cells, as distinguishing them from other bodies, were required; its functions were next gone into. The minute structure of bone formed one subject. The contents of the lacunæ, the development of the bone from cartilage, its composition, its growth and nourishment were asked.

These are types of the manner in which the subjects are treated. Microscopical specimens as usual formed a part of the examination. These questions are not more difficult than formerly were put; but it will be noticed that the subjects are more fully treated, and, in many other cases, the examination bore more directly upon practical histology. In examining micro-

scopical specimens it is well to move the slide about if necessary, for it may happen that the portion of the specimen in the field may not be recognized, while another might, and so for want of a little care a wrong answer is returned.

Physical Society.

At the seventh meeting, Mr. BRETT commenced by calling attention to the importance of studying the expression of the patient at the bed side. He gave instances to prove that the physiognomy of the patient is often governed by the seat and cause of his malady, and from them deduced that "different diseases express themselves in different ways in the patient's countenance, and that these expressions in themselves are in certain affections often so characteristic that the seat of the disease can be detected from them."

He then discussed the expression given by diseases of the various regions and organs of the body. Touching on the cerebral countenance, the aspect given by certain thoracic diseases, especially in the case of Pneumonia, and went on to the different kinds of Anæmia.

Particular mention was made of the abdominal face (Facies Hippocratica of the older authors).

After alluding to the expression found in Dyspepsia, Diabetes, Cholera, &c., he quoted Dr. MURCHISON with regard to the peculiar aspect of Typhus and Typhoid; calling attention to the flush on the cheeks in both these fevers, mottled and general in the former, uniform circumscribed and rosy in the latter.

After a few remarks on the expression in other fevers, he examined the physiognomy of children and infants in their ailments. He called attention to M. JADELOT'S three great traits on the face—the Occulo Zygomatic, the Nasal, and the Labial—found to accompany Cerebral, Abdominal, and Thoracic diseases respectively; and gave cases occurring in the wards in which these were well marked.

He concluded by describing the physiognomy of Scrophulosis, Tuberculosis, Hydrocephalus, Rachitis, &c.

In the debate that followed Mr. MACKERN said the subject of the paper was more a matter of experience. Probably every emotion had its corresponding expression. The mode of life of an individual would influence his physiognomy, but this disturbing element would not be found in children.

Mr. LUBBOCK adverted to facial paralysis. He said that in apoplexy the lower part of the face is paralyzed, but the subject of it can close his eyes.

Mr. LANE thought that the expression in lower life was equally due to change of tissue with the depressed nose and and radiating lines from the mouth of Syphilis.

Mr. SHADWELL thought that though expression might be a means of diagnosis, that to trust to this alone would often be fallacious.

Mr. DAVY said that physicians can often make a diagnosis by the appearance of a patient.

Mr. LOWDELL thought that this means of diagnosis might obviate a prolonged examination, but then showed how cyanos is might mislead.

Mr. GATHERGOOD quoted an instance in which bronchitis was diagnosed from the appearance of the patient, although he stated that cyanosis, dyspnœa, and universal râles were present, but the heart sounds were inaudible. In a case of abdominal face an abscess was found between liver and diaphragm after death.

Mr. MAC CARTHY thought that position was of equal importance with expression.

Mr. LANCASTER drew a distinction between expression and general appearance, and instanced the emaciation and form of the chest in phthisis.

At the eighth meeting, held January 22nd, Mr. LANCASTER in the chair, Mr. LANE read a paper on the "Treatment of Strangulated Hernia when Herniotomy is not permitted."

After referring to the importance of the subject, and the difficulty there was in impressing the patient with a due sense of his danger, especially in private practice, which differed in this respect so much from Hospital practice, where the consent of the patient was scarcely needed for operation, Mr. LANE mentioned some methods of reducing the bowel, not usually practised, such as forcible inspiratory efforts, after a deep expiration. He mentioned a case illustrating this treatment, also the effect of position, and the aid afforded in reduction by aspiration as practised by DIEULAFOY.

He then quoted a case, shewing that when operation had been refused, no treatment was employed, but the palliative, viz., opium; the result being fatal. Spontaneous reduction, he explained by the action of the muscular fibres, which caused narrowing of the bowel, and so it was released.

He next referred to purgatives as a means of treatment. Very strong coffee had successfully been used on the Continent, and he quoted a case shewing its successful operation. Enemata of Castor Oil and Turpentine had been successful.

He then stated that he had records of six cases which had been treated successfully by strong purgatives, of which he quoted two. The first was a man, aged 60, who had symptoms of strangulation for five days, and when seen had peritonitis, and fæcal vomiting, with a pulse of 140. Operation was refused, after the usual means had been tried. Ten minims of Croton oil were given with Turpentine, in gruel, and repeated in half an hour. This was not effectual, and the next day more Croton oil was thrown up the rectum, followed by ten minims in Turpentine by the mouth. This was followed by an enormous evacuation of fæces, disappearance of the hernia, and recovery of the patient.

Two years after, the bowel again became strangulated, but returned after twenty drops of Croton oil. Operation was refused.

The second case was that of a woman aged 42. A femoral hernia had been strangulated three days, operation was refused. An enema containing five minims of Croton oil was of no avail, fæcal vomiting ensued, and on the fifth day ten minims of Croton oil were given by the mouth, followed by another enema containing more oil. This proved effectual and the patient recovered.

In remarking on these cases, Mr. LANE said, that these patients owed their lives to the strong purgatives used, and that had operation been performed when the purgatives were administered it would probably not have succeeded. He explained the reduction, by the Croton oil causing forcible contraction of muscular fibres, and so the bowel liberated itself from the constriction, the weight of the adjacent bowel pulling the last small piece out.

In closing, he referred to the sequence of treatment at Guy's viz., taxis, ice, opium, chloroform with taxis and then operation, and quoted another case of death where operation had been refused, no remedial treatment having been adopted.

In the debate which followed the paper, many of the speakers seemed to have overlooked the main point in the paper, viz., that Kelotomy was always refused, and the question rested between inaction, or some other active treatment besides a cutting operation. Mr. BRETT in opening the discussion called the treatment unorthodox, and thought that in many of the cases the bowel must have been incarcerated only, and not strangulated. For fear of rupture purgatives were not advisable. Mr. POLAND and Mr. MORGAN both thought that Chloroform ought to be used in all cases, with taxis. The former inquired whether purgatives should be

given when the bowel was gangrenous. The latter thought that if a patient refused operation he deserved to die. Mr. LEE and Mr. ELCUM seemed to forget the point in the paper, the former asking if Mr. LANE wished to supersede the old method (operation), and the latter if he would recommend his method when an operation was inadmissable; he mentioned a case, showing that by treatment with ice and opium a patient might improve, though the hernia was not reduced.

Mr. LOWDELL and Mr. LACY took a favourable view of the treatment as being better than inaction, and thought the cases proved its value. The former gentleman speaking of ice and opium as treatment said, that ice counteracted the action of opium by diminishing the flow of blood, while the latter thought that the ice acting immediately would produce its effects before opium had time to act.

As regards the dose of Croton oil, Mr. JONES said that the standard dose should not be raised, because a larger one had been given occasionally, while Mr. SAGE thought that much of the drug would be rejected, it being administered during vomiting. Mr. LACY said that ten minims was an ordinary dose in India.

Remarks were also made by Messrs. DUKE, LUBBOCK, and SYMONDS.

Electrifying Room.

REPORT ON CASES TREATED IN THE ELECTRIFYING ROOM, FROM 1864, TO 1875 INCLUSIVE.

BY R. J. PYE-SMITH, F.R.C.S.E., AND J. H. SANDY.

Continued from page 10.

HEMIPLEGIA.—Of the 114 cases of Hemiplegia only 60 (all occurring since the beginning of 1872)* are fully reported. The average duration of the disease before electricity was applied was about a year, the extremes being one week and twenty years. The average period during which the treatment was continued was three months, the extremes being one week and one year. The Galvanic current was applied interruptedly to one or both of the effected extremities in 23 cases, of which 12 were improved and 11 not improved. Faradism was employed in 34 cases, of which 16 were improved and 18 not improved. In 3 cases both Galvanism and Faradism were used: 1 was improved, 1 not improved, and 1 is entered as cured. This last was an interesting case of a boy (C. H.) aged eleven, under the care of Dr. PAVY in August, 1872. (See Vol. 27 of the Medical Reports.)

It thus appears that with either form of treatment about half the cases were benefited and half not; but it does not seem that in any cases in which one form of electricity had failed the other was subsequently tried; nor are the notes sufficiently full to allow one to judge as to whether the improvement in the successful half of the cases may fairly be ascribed, either in whole or in part, to the electricity. Other observers do not seem to have had very striking success in the treatment of Hemiplegia. Both Faradism and Galvanism are recommended by most authorities, the preference being generally for the former when the muscles are lax and have lost a good deal of their electric excitability, such cases being also those most likely to be benefited. ALTHAVS recommends the more radical plan of applying a continuous weak Galvanic current to the diseased side of the head.

PARAPLEGIA.—Of the 41 cases unfortunately only 18 are fully reported, and in these the details of treatment are so various that the statistics are too small to be much relied upon. On the whole, however, the best results seem to have followed the application of the Galvanic current† to the spine, either with or without Faradism (or even Galvanism) to the lower extremities. The details are as follows:—Duration of paralysis—average, ten months, extremes, three weeks and two years. Period of electrical treatment—average, three months, extremes, one month and four months.‡ Treated by Galvanism to the spine, 7—of which 4 were improved, 2 not improved, 1 cured. This last was the case of a young woman, and apparently hysterical. By Galvanism to the spine and extremities, 4—of which 1 was improved, 3 not improved. By Galvanism to the spine and Faradism to the extremities, 1—improved. By Galvanism to the extremities, 2—not improved. By Faradism to the extremities, 3—of which 2 were improved, 1 not improved. By Galvanism and Faradism to the extremities, 1—not improved.

Thus just half the cases improved and half did not improve under the treatment. Where improvement took place it usually first showed itself by decrease of incontinence of urine. and this was in some cases the only good attained. REYNOLDS considers Galvanism and Faradism of the lower extremities of some use when the contractility of the muscles is diminished but not lost. ALTHAVS and TIBBITS likewise recommend this treatment, with or without the continous Galvanic current to the spine.

FACIAL PALSY.—Of the 23 cases 10 only are fully reported. The average duration of the paralysis was three weeks, the extremes being one week and six weeks. The average duration of treatment was three and a half weeks, the extremes being one week and five weeks. 8 cases were treated by Galvanism: of these 2 were cured, 4 improved and 2 not improved, the last two having attended only one week. 2 were treated by Faradism, and although in neither case did the muscles respond to the current at first. both were ultimately cured under its use. It would thus seem that the preference usually given by authorities to Galvanism, on the ground of its producing more reaction than Faradism, is of doubtful propriety.

On the whole, the cases of simple facial palsy must be considered to be among those most successfully treated by electricity, only 2 out of 10 cases having failed to improve rapidly under its use. It must however be admitted that the affection tends to get well without any treatment whatever.

PTOSIS, with or without paralysis of some of the other muscles supplied by the third nerve. Of this affection 7 cases are reported; in one instance it was bilateral. The average duration of its existence was a year, the extremes being three weeks and four years. The average period of treatment was four months, the extremes being one month and one year.§ 5 cases were treated by Faradism; 1 was cured, 2 improved, and 2 not improved. 2 were treated by Galvanism; of these 1 was improved and 1 not improved.

Thus somewhat more than half the cases appear to have been benefited by the treatment. Authorities are divided on the question of which current is the more often successful; probably Faradism is the more frequently used in this country. The only other case (out of the 13) that is fully reported is one of paralysis of the external rectus of a week's duration. It was treated by Faradism and cured in a week.

To be continued.

*So few indeed are the cases properly reported previous to 1872 that in the rest of this Report those only are referred to which have occurred since that date.

†Except when specially described as "continuous" or "continuously applied," one pole of the Galvanic battery was constantly moved, as described in the GAZETTE of August 14th, 1875.

‡In several instances the length of time is not stated.

§Neither here nor in any of the previous classes of cases was any definite relation to be made out between success and the duration either of the affection or of the treatment.

Surgical Wards.

The entries into the Surgical Wards during the month of January have fully equalled those of the previous months with regard to number, and include several of more than average interest. The chief operations were as follows:—Herniotomy, 3; Amputations, 7; Perineal sections, 5; Excisions, 5; Removal of Morbid Growths, 4; Sequestrotomy, 3; Plastic Operations, 2. Of the three operations for strangulated hernia the first was umbilical in a female æt 67. Hernia had existed for 40 years. Patient had never been able entirely to reduce it. Had worn a truss for 25 years which had kept the greater part of it back. During a violent fit of coughing a fresh portion came down which she was unable to reduce. She was admitted with all the signs of acute strangulation, and Mr. DURHAM operated in the usual way; the symptoms then having lasted for 12 hours. The sac was opened. Patient was relieved at first, but rapidly got worse and died 28 hours after the operation. At the p.m. there was pus in the sac and early peritonitis.

The second case was femoral in a female æt 61, hernia had existed for 3 years, but had always been kept in its place by a truss, until a violent fit of coughing brought it down two days before admission. Mr. COLLEY operated, symptoms of strangulation having existed for 30 hours. A small knuckle of intestine was returned and a large piece of bruised omentum ligatured and cut off. Patient is now doing well.

The third case was inguinal in a man æt 27, acute strangulation had existed for 10 hours when chloroform was given; the taxis then failing Mr. COLLEY operated. The hernia had existed from birth, and 3 years ago the patient was operated upon by Mr. WOOD, of King's, for the "Radical Cure." He had been obliged to wear a truss since the operation, and when questioned as to the result said that the rupture "made one or two attempts to come down, but on the whole kept up pretty well." Some little difficulty was found in returning the bowel on the present occasion, owing to the cicatricial bands produced by the former operation. Patient is going on favourably.

Another case of inguinal hernia admitted into Lazarus under Mr. DURHAM with symptoms of incarceration, if not of strangulation, proved amenable to opium and the ice bag.

There were two primary amputations after injury. One at the shoulder-joint by Mr. HOWSE for a complete "smash" of the whole arm, including the clavicle and acromion, several railway trucks having run over it. Patient never completely recovered the shock of the injury, and died on the second day. The other by Mr. FORSTER in upper third for compound comminuted fracture of the leg, caused by tram trucks. He is so far going on favourably.

There were also two secondary amputations after compound fracture of the leg, both at the knee-joint, one by Mr. FORSTER, 10 days after receipt of injury, and the other by Mr. BRYANT 7 weeks after, osteo-myelitis and symptoms of blood poisoning having set in. Both are at present doing well.

Mr. DURHAM amputated through the thigh for disease of the knee-joint of 2½ years' standing in a woman æt 56. Patient was in a "subpyæmic" condition at the time of operation, and died finally from inflammation of the veins extending up the stump.

Mr. HOWSE performed Pirogoff's amputation on a man æt 24, for advanced talipes which had existed the greater part of his life and incapacitated him to some extent from his work. The stump is healing rapidly.

The remaining major amputation was through the upper part of the humerus for a severe sloughing wound of arm and forearm, causing ulceration into the ulnar artery and severe hæmorrhage. The stump, notwithstanding the critical state of the patient from loss of blood at the time of the operation, is healing very rapidly.

There was one excision of the knee by Mr. HOWSE in a man æt 20, for disease of the joint of 7 years' standing. Two of the hip, one by Mr. COLLEY in a child æt 4, for disease of 10 months' duration, the other by Mr. HOWSE in a boy of 6½, who had suffered from trouble about the joint for nearly a year. In both cases the bone was divided in situ with a finger saw, the head being afterwards dissected from the soft parts. The after treatment consisted in simple extension with a weight and periodical dressing of the wound.

Mr. HOWSE who excised the elbow twice, once in a man of 37, whose history dated back 12 years and whose joint was completely disorganized and riddled with abscesses; and secondly for the removal of the necrosed ends of the bone after excision of the joint some time previously. This in a boy æt 10, with a 5 years' history. All the resections were performed under the "spray," with studied attention to antiseptic details.

There has been only one case of Carcinoma of the breast. Patient was 50 years of age and had noticed the growth for twelve months. It was situated at the upper border of the breast, had apparently begun outside and involved the gland secondarily. Under these circumstances Mr. BRYANT said it was justifiable to depart from the ordinary rule, and he accordingly excised the growth only.

In an advanced case of epithelioma of the tongue in a man æt 48, Mr. DURHAM removed the whole organ with the galvanic ecraseur, having first sawn through the symphisis of the jaw and cleared the tongue from its attachments by dividing the nucous membrane of the mouth. The case has gone on uninterruptedly well, and the patient is never tired of expressing his gratitude, the relief to the pain alone having been immense. The same surgeon also removed with a knife a large fungating, 18 months' growth from the back of the hand. It bore all the appearance of an epithelioma, but after examination showed it to be of a more innocent character. A very much smaller but truly epitheliomatous growth was removed by Mr. FORSTER with the cautery, from the same situation in a man aged 64. The history dated from a blow received 5 months previously. A superficial epithelioma at the angle of the nose in an old woman was cauterized by Mr. BRYANT.

Mr. DURHAM operated for Vesico Vaginal fistula 14 weeks after labour, with partial success.

A girl of 8 years old, fell, apparently, on the broken arm of a chair and was admitted with laceration of the perinæum and a lacerated wound of the rectum about 1½ inches long, the sphincter ani fortunately having completely escaped. The case was treated directly after admission, the rectal wound being first sewn up with a fine continuous catgut suture, which on account of the laceration of the peinæum was easily accomplished the in the finger rectum bringing the whole length of the wound to view through the enlarged vaginal orifice. The peinæum was then brought together with silk suture. The legs were tied together, the water drawn off periodically, and the bowels locked up with opium. An examination 4 weeks afterwards showed a very fair, if not quite perfect, perinæum, and failed to detect any evidence of the wound of the rectum.

Medical Wards.

STEPHEN.

5. Cerebral.

11. Enlarged liver, probably malignant disease of retro-pertoneal glands and liver.—No jaundice or pain.

19. Mitral regurgitation with congested liver—apex in nipple line, displaced downwards and to left—bruit very loud at angle of left scapula, urine normal, no dropsy except ædema of scrotum.

21. Bronchitis—breathing 54, reduced to 34 in 24 hours by Potassii Bromidi gr. xv t d.s.
23. Phthisis and Morbus Cordis.
30. Obstruction of Œsophagus.
35. Right Hemiplegia—complete right facial paralysis and deafness on same side—no paralysis of tongue—loss of taste in right anterior half of tongue.
36. Cerebral.
40. Cerebral.
44. Locomotor Ataxia.

ADDISON.

23. Albuminuria, vomiting and diarrhœa, lardaceous (?) Mitral regurgitation after rheumatism.
32. Morbus Cordis.
38. Progressive Muscular atrophy.
39. Paraplegia (acute myelitis) boy aged 6.

MARY.

2. Morbus Cordis—congested liver, &c.
9. Labio-glosso-laryngeal—paralysis.
11. Abdominal—Tubercular or Lardaceous (?).
13. Lardaceous disease of liver, spleen and kidney.

CLINICAL.

2. Pleuro Pneumonia.
6. Thoracic Aneurism (?).
17. Tumour connected with right kidney.
19. Syphilitic disease of liver—Ascites.
21, Lencocythæmia.
24. Typhoid.
28. Typhoid.
30. Carcinoma of liver and stomach.
31. Ulcer of stomach—bronchitis with tricuspid regurgitation.

ADDISON 24.

Eliza Harris, 25, admitted January 21st. Family history good. Subject to "winter cough." Confined four months ago. Two months ago seized with shortness of breath and cough. Three weeks ago abdomen began to swell, and has continued to increase in size. Very little water passed since, and feet and legs have been swelled the last 14 days. *On admission.* Face pale; lips livid; great dyspnœa. Pulsation in external jugulars marked; soft and distant systolic murmur to be heard to the left of ensiform cartilage; heard very indistinctly at apex; not at all at heart.

Lungs resonant, râles with dry bronchitic sounds heard all over chest. Sputa copious, muco-purulent. Abdomen distended with fluid. Liver felt extending below ribs. Œdema of both legs and feet. External genitals much swollen. Urine scanty sp. gr. 1025. No albumen or sugar. ordered, Træ Digitalis ℥x., Sp. Ammon Co. ʒ s.s., Sp. Chloroform ℥x., Ex Aqua 4tis horis, Pulv Jalapæ Co. ʒ s.s. statim. Not much relieved, breathing still continues very distressed. Patient cannot lie down in bed. 25th Paracentesis abdominis; 7 pints of reddish opaque albuminous fluid drawn off. Rep. Mist. Patient was very much relieved by the tapping, and up to the present time she has been making a rapid recovery, The bruit disappeared on February 4th. The tapping in this case was done with the object of relieving the circulation, by allowing more fluid to pour out into the abdominal cavity, and so lessen the tension within the blood vessels, by concentrating the blood.

STEPHEN 8

was a case of Phthisis of right apex of lung, with suspected disease of left apex, which became more evident after a week or so in the hospital. Sudden Pneumothorax on left side came on. Patient became rapidly cyanotic. Respiration 56, evidently dying. Paracentesis Thorasis performed with fine trocar and canuunla, and air allowed to escape. Ten minutes after the operation his breathing was reduced to 34, and cyanosis had disappeared, patient expressing himself as greatly relieved. No evil results occured from the tapping as he lived for 4 days, ultimately dying of Pleuro-pneumonia of right lung.

Unfortunately for this man, the Pneumo-thorax occurred on the side less diseased, leaving him very little sound lung to breathe with; but for all this his life was certainly prolonged and I see no reason if the operation is performed, why a better result than the one stated should not be attained in other cases, where the operation is called for. At all events, I think this case should in no way discourage us from attempting Paracentesis in urgent cases.

STEPHEN 8.

Syphilitic contraction of Trachea.—Death.

R. P., 42, admitted January 20th. No history of gout, rheumatism, or syphilis. Has lived in India 8 years. No illness till two years ago. Had gonorrhœa 15 years ago and a sore. No secondary symptoms.

Present illness.—About 2 years ago he got very wet, and remained in his damp clothes. This brought on a cough and and sore throat, and pleurisy of right side. Has had slight hacking cough since. About 2 months ago his cough began to get worse, and he suffered from shortness of breath, which has been gradually getting worse. For the last few days has passed very little urine, of a light colour. His feet and hands have been occasionally swollen.

On admission.—Pale, emaciated about the face, chest well formed, hypervesonant; breathing diaphraghmatic, snoring inspiration; croupy cough, occasional laryngeal stridor; voice normal. No dulness in mediastinum; no capillary congestion in front or back of thorax; no tenderness of spine; no enlarged glands or other evidence of syphilis. Bones and joints normal. Muscles wasted. Liver dulness normal. Spleen enlarged.

Urine sp. gr. 1010. Albuminous.

Sputum contained pus and blood.

P. M.—Syphilitic ulcer half an inch below vocal cords in in median line; general ulceration, with erosion of cartilages about bifurcation of trachœa. Right bronchus very much narrowed from contraction. Chronic fibroid puenmonia of bases of lungs—old. Lungs—snoring rhonchus heard all over chest, as if something was obstructing the bronchi, breathing deficient on right side. Heart sounds normal. Recent pleurisy of right lung. Lardaceous disease of liver, speen, kidneys, and supra-renal capsules. Lardaceous disease of intestines.

STEPHEN 14.

Ulcer of Duodenum Plumbism.—Death.

T. M., 48, plumber and painter, complained of constipation, pain about umbilicus. Blue line on gums. Treated with castor oil and opium without relief. The pain still continuing and apparently getting worse, especially at night. He took very little food principally liquids, as solids seemed to increase the pain; no vomiting. Pain not localized. No tenderness on pressure in any part of the abdomen. He gradually got paler and worse till, at last he passed blood with his motions, and eventually sank 4 days after from exhaustion.

Mr. HIGGENS examined his eyes and reported both optic discs extremely pale. Retinal blood vessels reduced to the finest threads, very little blood enters either retina. Choroid somewhat irregularly frequented, but its colour appears normal.

For the last 4 days of his life he was semi-unconscious, his body generally was excessively anæmic and a systolic murmur could be heard at base of heart.

P. M.—Clean cut ulcer about the size of a shilling, situated immediately external to pyloric ring, into the floor of which the common bile duct, and hepatic artery opened. There was a great deal of inflammatory thickening around the ulcer, the head of the pancreas being involved so as to give the feeling of a tumor.

Kidneys granular and pale, other organs anæmic, but healthy in structure, with the exception of the heart which contained an excess of fat amongst the muscular fibres.

PHILIP.

4. Obstruction to the venous circulation in lower extremities, Dyspnœa and signs of bronchitis.—Growth. (?)

6. Æt 16, more or less blue and short of breath since infancy, signs of bronchitis, cyanosis, general dropsy.—Death. Emphysema, dilated bronchial tubes, dilated and hypertrophied right ventricle.

23. Fits—aphonia—8 weeks since a fright, æt 18.

31. Pneumonia—Phthisis.

32. Idiopathic Anæmia.

46. Pneumonia of right apex.—Convalescent.

BRIGHT.

8. Nervous (?) organic. (?) Functional.

23. Chronic tubular nephritis. Abdominal tumour rapidly formed; cystic; pointed, incised, contents albuminous fluid of sp. gr. 1016, and thick heavy puriform matter. No hooklets or membrane. Suppurating cyst in left lobe of liver. (?)

4. "Idiopathic" hæmatemesis.—Convalescent.

17. Enterica

ADDISON.

11. Tubercular Meningitis.—Fatal.—Ill 17 days.

[We are indebted to Mr. RENDALL for the above.]

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

ANATOMICAL AND PHYSIOLOGICAL EXAMINATION.

January 15th, 1876.

1. What is the action of the arteries in the circulation of the Blood? What evidence can you offer of the influence of the nervous system on this action?

2. Describe the structure of the Pancreas; and state the effects of the Pancreatic Juice on the chief constituents of food.

3. Describe the articulation between the Lower Jaw and the Skull; and name the parts in relation with the ligaments of the joint.

4. Name the muscles attached to the Radius. Give the precise points of their connexion with that bone; and state their action.

5. Describe the course and relations of the Profunda Femoris Artery; and give the Anastomoses of its branches.

6. Name the muscles and tendons of the Sole of the Foot in the order met with in dissection.

The following gentlemen passed the above examination:—Mr. F. B. Maclean, Mr. E. R. Mansell, Mr. R. S. Taylor, Mr. A. E. Chesshire, Mr. W. Gibson, Mr. H. A. Baber, Mr. G. H. Parry, Mr. W. N. Paddicombe, Mr. J. K. Womersley, Mr. J. Johnson, Mr. J. H. Earle, Mr. W. Gross.

Only one man was referred.

DIPLOMA OF MEMBER.

EXAMINATION ON SURGICAL ANATOMY AND THE PRINCIPLES AND PRACTICE OF SURGERY.

JANUARY 21, 1876.

From 1·30 to 4·30 o'clock, P.M.

Candidates *must* answer at least four (including one of the first two) out of the six questions.

Answers to *less* than six questions will not be received before 4 o'clock.

1. Describe the several relations of the Brachial Artery, and of the Veins and Nerves in front of the Elbow-joint; and state where and how you would perform Venesection at this part.

2. Give the relations, having surgical importance, of the Urinary Bladder in the male, under various modifying conditions.

3. What are the usual causes, the local indications and symptoms of Acute Phlebitis? State how you would treat such a case, and what are the Pathological changes in and near the Vein which are likely to occur during its progress.

4. What are the varieties of Cataract? How are they distinguished from each other? and to what pathological changes are they due?

5. Describe the two most frequent Dislocations of the Shoulder-joint; and state how they may be distinguished from each other, and from other Injuries about the Joint.

6. Under what circumstances, and with what attendant symptoms, is the use of the Trephine justifiable in Injuries of the Head? Describe the Operation of Trephining; and mention its risks, both immediate and remote.

EXAMINATION ON THE PRINCIPLES AND PRACTICE OF MEDICINE.

JANUARY 22, 1876.

From 1·30 to 3 o'clock, P.M.

1. Describe a case of Rheumatic Fever, mentioning the complications which are most apt to arise; and state how you would distinguish them, and treat them.

2. What is meant by tactile vibrations or vocal thrill? and what are modifications which the sign undergoes in disease? What is understood by crepitation, bronchial respiration, pectoriloquy, ægophony, and metallic tinkling? and what are the conditions upon which those several signs depend?

3. Mention the preparations of Iron, Zinc, and Arsenic contained in the Pharmacopœia; and state for what purposes and in what doses they are severally used. Write a prescription for a mixture to assist expectoration and relieve cough. The body of the prescription to be written in Latin in full, the directions in English.

The following Guy's men passed the above examination:—Messrs. C. T. Alexander, J. R. Burton, L.S.A., J. Johnson, M.B. (Melbourne), J. McCarthy, T. A. McCullagh, W. Phelps, L.S.A., F. G. A. Rogers, H. Wright, H. L. Champneys, G. R. Chadwick, L.S.A., E. Duke, A. Finch, W. C. James, L.S.A., G. Mackern, R. R. W. Oram.

APOTHECARIES' HALL.

The following questions were recently given for the Primary Examination:—

1.—How may the following gases be prepared and collected:—Carbonic Acid, Oxygen, Chlorine, Sulphurous Acid and Nitrous Oxide?

2.—Explain the terms Analysis, Synthesis, Dialysis, Colloid and Crystalloid.

3.—What is common Bleaching Powder (so called Chloride of Lime)? Under what forms do Calcium Compounds occur in nature? Give as many tests as you can for each of the following metals:—Lead, Copper, Silver, Mercury.

MATERIA MEDICA AND BOTANY.

1.—What Salts and preparations of Zinc are there contained in the B.P.? Give the doses of those given internally.

2.—What is Ergot of Rye? How is it known to be good, and what preparations are given and their doses?

3.—Describe the floral envelopes and general organs of a Thalamifloral, Calycifloral Corollifloral. Describe the orders Liliaceæ and Melanthaceæ and give their distinguishing characters.

VIVÂ VOCÊ.

The following were some of the questions given;—

1st Table.—(*Shown Socotrine and Barbadoes*) *Aloes.* What

are they? How would you distinguish them? How obtained? What other drugs are obtained in the same manner? From what kind of Capsules is Opium obtained? What varieties are there? Which is the best? Is that a good specimen? (*Shown Alum*) Is it a simple Salt? How could you liberate the Ammonia from it? What is that? (*Colchicum Corm*) What is the botanical name? What is a Corm? What order does it belong to? (*Shown Iodine*) How is it obtained? What are its preparations? What other Iodides are there?

2nd Table.—How do the different elements combine with each other? How can you prove that they combine according to a definite rule? How are the specific gravities of Solids, Liquids and Gases obtained? Give tests for the Chlorides and Sulphates? Shown several precipitates in test-tube—asked what they were.

3rd Table.—3 or 4 prescriptions to read. What is Rhubarb? How many kinds are there? How would you distinguish them? Which is the best? What are the preparations? What is contained in Pil. Rhei Co.? What part of Cinnamon is used in medicine?

4th Table.—(*Shown an Injected Heart*) Place it in position. Mention the vessels you see there. Is the inside of the right Auricle rough or smooth? Mention the openings in it. What is the Valve between the right Auricle and Ventricle called? What do you see on the inside of the right Ventricle? How many kinds of Columnæ Carneæ are there? Where are the Muscule Papillares attached? What prevents Regurgitation into Superior Vena Cava? What prevents Regurgitation from Pulmonary Artery? What are the Semilunar Valves formed by? What is the direction of the Fibres in them? What is the structure of the Bloodvessels? What does their Elastic Tissue do? What is the good of the Muscular Tissue? Which predominates in the large, and which in the small vessels? Describe the Fœtal Circulation. Which is obliterated first, the Ductus Venosus, Ductus Arteriosus or Foramen Ovate?

Athletics.

GUY'S v. MARLBORO' NOMADS.

This match was played at Blackheath, and resulted in a victory for the Nomads.

Our club, owing to the match at the Oval, and the examination at the College taking place on the same day, was very badly represented, not more than thirteen men turning up, and only five of them belonging to the first fifteen. In spite of these disadvantages the game was a very even one, resulting as follows:—The Nomads obtained two goals (both dropped), one touch-in-goal, and two touch-downs, while Guys scored one goal, a try, one touch-in-goal, and *three* touch-downs. During the first ten minutes one of the Nomads' half-backs dropped a goal, and we were compelled, almost immediately afterwards, to touch down in self defence. These two events following one another in such quick succession had the effect of making our men exert themselves a little more, and the forwards, aided by some good runs by McClean, worked the ball well into our adversary's quarters where it was kept until half time was called, a touch-in-goal and two touch-downs being scored by us in the meantime. The ball being restarted and well followed up by the Nomads, who were now playing down the hill, another goal was kicked against us by a good drop from one of their backs. From now up to the close of the game Guy's had decidedly the best of it, and pressed the Nomads severely. Morse, who was playing very well, dropped a goal, and soon afterwards Howell, who, with Scott, worked hard on the scrimmages, by following up quickly ran in with the ball. The place kick, which was a difficult one, was unfortunately unsuccessful. Besides those already mentioned Welchman and Kerr made themselves conspicuous by their good collaring and general good all-round play throughout the game. The following composed the Guy's team:— Keer (back), Welchman (¾ back), Morse and McClean, (Capt. ½ backs) Howell, Scott, Mansel, Liddell, Cox, Green, Chubb, Rees, Stanley Taylor.

UNITED HOSPITALS v. LIVERPOOL.

This match was played on Saturday, January 22nd, at the Oval, a great many spectators being present, and resulted in a win for the hospitals by two ties and three touch downs to nothing. It was rather one-sided, the medicals priming their opponents throughout the game.

The teams afterwards dined together at the "Gaiety," and a most enjoyable evening was spent. The following played from Guy's:— W. W. PINCHING, W. G. GRAY, A. W. PEARSON, P. F. GILBERT.

GUY'S v. HARLEQUINS.

This match, played at Blackheath on Saturday, January 29th, was won by the Harlequins by one goal and two touch-downs to nothing. We were, unfortunately, very weak, especially behind the scrimmage, as will be seen by the following names, and considering this our team made a very good game of it.

P. F. Gilbert (Capt.), W. H. Welchman, J. Keer (Backs), J. F. Breach (¾ back), A. Scott, Morse (½ back), J. Rendall, H. Duke, A. Howell, H. Hetley, H. Liddell, H. L. Champneys, R. Stanley Taylor, and G. Green.

NORTH v. SOUTH.

In this match, which was played at Manchester, Pinching and Gray represented Guy's.

GUY'S v. ST. THOMAS' HOSPITAL.

This Match, the first of the ties for the Cup, was played on the 4th inst. At five minutes past three o'clock St. Thomas's kicked off. Guy's, having won the toss, chose the western goal, with the sun at their backs and the wind in their faces. At first the play was chiefly confined to the forwards, till at last a long kick by St. Thomas' sent the ball over the Guy's line, and Breach had to touch down. The kick off was a failure, and the ball being immediately returned, Guy's was obliged to touch down a second time. Then St. Thomas' were driven back, and Gray made a fine run, followed by one as good by McLean, though in each case the collaring of the St. Thomas' backs proved fatal. The Guy's forwards now took the ball down to the lower touch line, and, after some severe scrimmages, Gray got round, and, reaching the middle of the ground, nearly dropped a goal for Guy's, forcing St. Thomas' to touch down. After half-time, Guy's followed up Gray's kick off with vigour, and for some time St. Thomas' were hard pressed on their goal line, but, through some good play of Darker, the ball was taken well over the midway line and kept in neutral ground till just before the finish, when a long kick by Jeffreys compelled Guy's to touch down a third time. The game was decided in favour of St. Thomas' by three touch downs to one. Referee, Mr. E. B. Turner; umpires, Messrs. Isaacson and Turner.—*St. Thomas'*: Leatham and Landon (backs), Darker (three-quarter back), Jeffreys and Tatham (half-backs), Munns, Smith, Macdonald, Darker, Houghton, Lun, Heygate, Bickford, Maybury, and Collier (forwards). *Guy's*: A. W. Pearson and J. J. Breach (backs), W. G. Gray (three-quarter back), F. B. Maclean and A. Finch (half-backs), W. W. Pinching, P. J. Gilbert, J. Rendall, W. W. Welchman, H. Duke, J. Keer, J. C. Wilkinson, A. Howell, A. Scott, and R. F. Taylor (forward).

St. George's had previously beaten King's.

London and St. Mary's played a tie.

University has beaten Bartholomew's.

St. George's has beaten St. Thomas'.

The final match for the Cup will be played at the Oval on the 21st.

CLINICAL THERMOMETERS.

With clear black burnt-in divisions, which cannot be effaced or rubbed out.

THE STANDARD CLINICAL THERMOMETER, by which all others may be tested at any part of their graduations 0 10 6

THE HOSPITAL CLINICAL THERMOMETER, clear, distinct, and correct 0 6 6

THE PATENT CLINICAL THERMOMETER, with Indestructible Index, which cannot be shaken into the bulb 0 15 0

Kew Certificates from the Royal Kew Observatory may be had with any of the above at 1/6 extra.

THE IMPROVED PATENT PORTABLE SPIROMETER 5 10 0

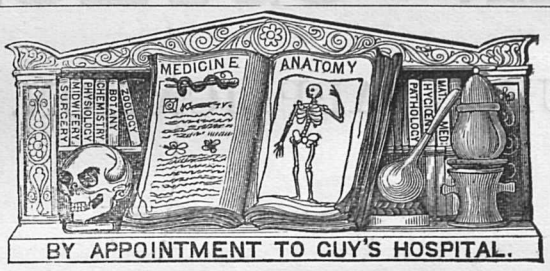
L. CASELLA, 147, Holborn Bars, London, E.C.

LIBERAL TERMS ALLOWED TO AGENTS AND ON WHOLESALE ORDERS.

3d. IN THE 1s.

DISCOUNT OFF

MEDICAL BOOKS.



MEDICAL BOOKS BOUGHT OR TAKEN IN EXCHANGE.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

A Set of Quain & Wilson's Anatomical Plates—Coloured—(Published £10 10s.) For Sale Cheap.

TO STUDENTS.—FIRST-CLASS SURGICAL INSTRUMENTS.

The CHEAPEST HOUSE in LONDON is C. BAKER'S, 244 & 245, High Holborn.

Every article is warranted of the best manufacture.

STETHOSCOPES, every variety, from 2s. each.
DISSECTING CASES, in Ivory Handles, from 16s. 6d. the set.
DISSECTING CASES, in Ebony Handles, from 10s. 6d. the set.
POCKET DRESSING CASES, from 15s. 6d.
MIDWIFERY FORCEPS, 10s. 6d.
STOMACH-PUMP with ENEMA combined, 21s.
POCKET MIDWIFERY CASE, 8s. 6d.
OPHTHALMOSCOPES, for the Pocket, from 6s. 6d.
LIEBREICH'S, ditto, 14s. 6d.
LARYNGOSCOPE, complete in Case, from 25s.
TOOTH FORCEPS, Tomes', all kinds, 5s. 6d. each.
Ditto Clendon's, ditto, 4s. each.
FERGUSSON'S SPECULA, all kinds, 3s. each.
SILVER-PLATED CATHETERS, from 1s. 9d.
HYPODERMIC SYRINGES, from 6s. 6d.
URINOMETERS, from 2s. 6d.

The Self-Registering Clinical Thermometer,

In Case, complete, 3 inch, 5 inch, or 6 inch, at 6s. each.

Catalogues free by post.—Second-hand Surgical Instruments of all kinds kept in stock.

STUDENTS' MICROSCOPES, £3 3s.—C. BAKER'S Students' Microscopes have all the latest improvements, with object-glasses which will define the most delicate pathological structure. Complete, in case, £3 3s.
INJECTED and other PATHOLOGICAL OBJECTS, from 1s. 3d. each. MATERIALS and APPARATUS for MOUNTING of every kind.
Catalogues free by post. Observe—244 & 245, HIGH HOLBORN.

MICROSCOPES AND APPARATUS OF EVERY DESCRIPTION.

GLASS SLIPS, COVERING GLASS, CLIPS, LABELS, OBJECT BOXES AND CABINETS, DROPPING TUBES, MOUNTING FLUIDS, &c., &c.

CLINICAL THERMOMETERS 7s. 6d. & 9s.

IN METAL CASES TO PROPEL AS PENCIL, 15s.

STANLEY, Optician,

13, RAILWAY APPROACH,

LONDON BRIDGE, S.E.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine, and Surgery.

NEW SERIES.—No. 3. MARCH, 1876. SIXPENCE.

CONTENTS.

Clinical Medicine	27	Electrifying Room	35
Case of Cysticercus in Orbit	29	Hogden's Splint	36
Aspiration in Strangulated Hernia	30	Medical Cases	36
Remarks on the Wainwright Tragedy	32	Medical Wards	38
Obstetrics	34	General	38

SAVORY & MOORE'S

PHOSPHORUS PREPARATIONS.

PHOSPHORISED COD-LIVER OIL. First manufactured in this Country by Savory & Moore, and generally recognized by the Profession as the "Original Preparation." This Oil is now extensively used, and is admitted to be an important therapeutic remedy. The advantage of this preparation (which has been much imitated, though with questionable success) consists in, the ability to administer a *sufficient* dose of Phosphorus without the admixture of a *large* quantity of Cod Liver Oil. *Vide* case of Phthisis treated by this Oil. *The Lancet*, April 24, 1875.

PHOSPHORISED COD LIVER OIL with QUININE.

COMPOUND PHOSPHORISED COD LIVER OIL, containing besides Phosphorus, Iodine and Bromine

SUPPLIED IN BULK OR SMALL BOTTLES.

PHOSPHORISED LINIMENT. A Continental preparation used with success in the treatment of Rheumatism, &c.

PHOSPHORUS PILLS of any size and strength, non-resinous, and perfectly soluble; the most reliable and agreeable method of administrating this remedy.

As much of the uncertainty of operation experienced in the internal administration of Phosphorus is to be traced to the use of Oxodised or Allotropic Phosphorus, Messrs. SAVORY & MOORE beg to state that the foregoing Preparations contain only the *purest* description of this article, which is more certain in its action, and therefore more satisfactory to prescribe.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.
TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

The Presidents of the Physical Society acknowledge with thanks the following donations to the "Gazette":—

Dr. G. EASTES ...	... ...	5s. 6d.
W. H. HUSSEY, Esq. ...	...	10s. od.
D. H. FORTY, Esq. ...	...	10s. od.

We cannot acknowledge all the Subscribers to this issue. Each will please consider the receipt of the "Gazette" sufficient for this purpose.

TERMS OF SUBSCRIPTION.

The "Gazeite" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to H. DAVY, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Medicine.

The subject of Dr. PAVY's Clinical Lecture on February 12th, was Diabetes, illustrated by a case at that time in Clinical Ward.

The patient was a girl aged 18.

Dr. PAVY remarked that the element of age formed a most important consideration in regard to prognosis, and that this girl had a bad prospect before her as she would most probably not be alive two years from that time. It is a progressive disease with young subjects, but controllable with elderly people; a person 50 years of age may go for years if properly treated and may get better and better in health. With young subjects the symptoms may be kept under for a time, and the patient may be placed under the most favourable conditions, but progressive disease goes on and the patient will die of gradual exhaustion of power terminating in coma, if not carried off by phthisis or some incidental inflammatory affection.

In the present case the family history showed that there was a tendency to chest disease, the father having died of phthisis and the mother being subject to winter cough. Dr. PAVY then spoke of the manner in which diabetes runs in families, and mentioned some remarkable instances which had come under his notice.

The girl has been healthy, except for winter cough and neuralgia. The present illness came on three months ago suddenly; this is often the case though the disease has existed for a certain time before the symptoms show themselves.

Her mother noticed at this time (three months ago) that she ate more than usual, became thirsty, complained of a feeling of emptiness at the pit of the stomach. She has lost flesh for the past two months, her skin has been drier than usual, she has been getting very weak and she has been obliged to give up work.

On admission, she was a sharp featured girl, much wasted, eyes bright, skin dry, tongue red; her eyesight was not defective, but this may become so from three causes :—

1.—Cataract (more common in elderly people).

2.—Want of adapting power in the ciliary muscle; this may be remedied by the use of calabar bean.

3.—Impaired nutrition of retina; this may also be restored by proper treatment.

The patient complained of great thirst and a craving for food. Bowels regular, chest normal, no cough. Urine s g. 1040, loaded with sugar. If excess of urine be passed and this be of a specific gravity of 1040, the conclusion may with almost certainty be drawn that sugar is present. But one must be very careful that the urinometer used is correct, some of the instruments sold being seriously at fault in this respect. As to the detection of sugar there are several tests employed.

1.—Liquor Potassæ. This may give a reaction when no sugar is present if, as is sometimes the case, the reagent is contaminated with lead.

2.—Trommer's test, consisting of Sulphate of Copper and Liq. Potassæ. A certain test but not one of the most delicate.

4.—Tartrate of Potash and Liq. Potassæ with Sulphate of Copper. This gives a blue liquid consisting of Oxide of Copper held in solution by the Liq. Potassæ through the agency of the Tartrate of Potash.

Before considering the detection of sugar in diabetic urine the question must be asked, is sugar present in normal urine? The answer is, yes; but in too small a quantity to be recognized by the ordinary test.

Dr. PAVY then described a process by which he has recently obtained sugar from healthy urine, and exhibited some of the saccharine matter thus obtained; it was tested and found to give the behaviour of sugar. It has also been proved to be sugar by placing yeast with it and causing it to ferment, forming carbonic acid and alcohol, which were recognized by their ordinary reactions.

Treatment.—Dietetic and medicinal.—There is in this disease a want of assimilative power for starchy matter and sugar. In a healthy person these principles are lost sight of after ingestion, whilst when a diabetic person takes them the sugar passes through the system unchanged and is voided with the urine. Normally there is only a trace of sugar in the circulatory system, increase this and the urine which affords an index of the state of the circulatory system will be correspondingly influenced and charged with sugar. The diet must be regulated according to this principle. Exclude from the diet the elements which cannot be assimilated, and which, in passing through the system, disturb its nutrition.

One form of treatment has been put forward, which, from the boldness with which it has been vaunted as a cure, and its real capabilities must have often resulted in considerable disappointment, viz., the skim milk treatment. This was advanced for three diseases, viz. :—Bright's and Addison's diseases and Diabetes.

In the case of the two first the treatment is not now pushed in the same way as it is in the case of diabetes. It is a form of treatment which is wrong in principle and bad in practice. Milk contains sugar of milk, which behaves in the system like any other form of sugar and is etiminated in the urine, unless a case of diabetes is come across in which sufficient assimilative power exists to dispose of a certain amount of sugar.

Dr. DONKIN says that fat is convertable into sugar, whereas Dr. PAVY says that diabetic patients thrive upon fat, and it has been found to have no influence upon the urine.

This patient has been treated so as to test the above assertions. The sugar in the urine was first reduced by diet from 2000 grains in 24 hours to 894 grains, and then 4 ounces of lactin or sugar of milk were given each day. This notably increased the quantity of

sugar in the urine; it was then left off and the quantity diminished. An experiment was also made with fat, which did not increase the sugar. Fat is found by the concurrent testimony of the most renowned observers to be beneficial to diabetic patients.

As for medicine, opium or one of its active principles is to be given; of these Codeia is the best as it does not produce the narcotic effect of morphia or of opium itself.

THE subject of Dr. MOXON's Lecture was Heart Disease. He remarked that his subject was a difficult one to approach, as it was generally so well understood by students as far as regards the stethoscopic diagnosis of the disease. It was a disease in which the student's knowledge of Anatomy and Physiology helped him greatly in diagnosis of valvular disease, and told him so far, almost as much as the experience of the more experienced practitioner. There is so much knowledge of heart disease which we can reach with little experience that we are too apt to be satisfied with this, though it leads only to a knowledge of the valve affected, whilst we may by experience know the state of the whole heart; and thus judge the future of the patient with tolerable certainly.

Dr. MOXON next remarked that the commoner diseases of the Heart were the following:

Acute. Eg. Pericardits and Endocarditis in acute Rheumatism, &c.

Chronic.

(1) Hypertrophy.
(2) Dilatation.
(3) Fatty Heart.
(4) Atrophy of Heart.
(5) Valvular Diseases.

Among the latter may be noticed especially Aortic Obstruction, Aortic Regurgitation, Mitral Obstruction, Mitral Regurgitation.

The acute diseases were not spoken of at length, and Dr. MOXON then went on to consider the symptoms of the different chronic diseases.

Hypertrophy.—Pure and simple hypertrophy is not discovered as a rule. Therefore no physical signs can be given; though the symptoms of hypertrophy as generally spoken of are comprehended under the phrase "Excess of the Phenomena of Life." They may be put down thus: Face flushed, eyes bright, sleeplessness, headache, and breathlessness on exertion.

Dilatation.—A very important pathological state of the heart. The symptoms of a moderate degree of this are:

(1) A larger area of dulness extending upwards and to the left.
(2) Heaving action.
(3) Loss of definiteness of the sounds.

Dr. MOXON then went on to say that there are many cases seen in which the patient has disorder of the heart which is revealed by a murmur of some kind, and in addition to this he is a little out of health; in such cases the question was, whether the ill-health was due to the heart disease or the ordinary causes of ill-health which all people are more or less liable to, whether they have perfect hearts or not? He was disposed often to look favourably on such cases and to consider the more ordinary conditions to be those really producing the symptoms. All the symptoms in persons with imperfect hearts must not be set down as heart disease. But if there is dilatation present the case is much more serious, and the existence of this condition would influence a Physician strongly to give a bad prognosis; for instance, if the patient was one who was about to insure his life. This is a question which many are called upon to give an answer to, without much time for reflection. You may have to decide that some imperfections of sounds are unimportant, but if there is dilatation you must regard the person as unsound. In dilatation of the heart the blood is imperfectly circulated and so falls into an unhealthy state. The blood in nourishing the body is variously changed in the different parts, so that good circulation is required to keep it homogeneous, and any defect in the power which propels it will cause it to be ill-mixed, thus becoming impure. Hence in dilatation with its consequent enfeeblement, one must not think only of the immediate state of the heart itself, but also of the nutritive state of the blood; we are not to think that it is solely an *organ* which is at fault.

The physical signs of heart disease are not our only or our chief guides to the management of a case; people may go on for years with valvular disease as revealed by loud murmurs, and yet show no signs of them in their general health. A case was then mentioned as being in Clinical Ward illustrating this point. It was the case of a man suffering from mitral regurgitation. A disease which is not caused by hard work. He had had, however, rheumatic fever 30 years before, and had spent all these years doing hard work, and only gave signs of failing health three months ago, though the disease of the heart must have dated from his rheumatism 30 years ago.

In cases of heart disease, learn to group them according to which part of the body is at fault; for heart disease tries all parts of the body and brings trouble to the weak part; bringing blueness to those with weak lungs, yellowness to those with weak livers, and whiteness to those whose blood easily fails. In such cases help may be usefully directed to the weak organ or part.

Another case was then referred to, of a girl now in Clinical Ward in whom there was aortic disease and anæmia, and who improved decidedly under the administration of iron. When dilatation is severe then come the grave effects seen in dropsical heart cases, and the treatment has to be directed to the relief of the stagnation and of its results. The

GUY'S HOSPITAL LIBRARY

stagnation of the blood both prevents the forward delivery of the blood, thus causing insufficient arterial supply, and also produces over-fulness of the veins. Hence we have arterial anæmia producing paleness as well as stagnation tending to lividity. In aortic disease this paleness prevails, because venous stagnation is less direct and there is nothing but arterial deficiency, whereas in mitral disease there quickly arises venous overloading, and so the anæmia is complicated with congestion; hence aortic cases are pale people liable to fatal fainting, but mitral cases are duskier, yellowish, and blueish from hepatic and pulmonary congestion.

If the stagnation finds out weakness in the lungs, breathlessness and dyspnœa arise; if in the kidneys, there is scanty urine, because the blood does not flow freely through the organ; if in the liver, this enlarges, and biliousness is present.

All these symptoms prevail most towards the lower parts of the body, the upper part remaining free; so that the brain does not feel the trouble so much or at all. At last dropsy supervenes, and then the future is generally short: a case however was mentioned the conclusion in which this was not true, for the patient had suffered from dropsy following acute rheumatism seven years before, and had spent these years working hard, though eventually she died of the disease.

So that you cannot well treat heart disease or make a judgment of its future by mere stethoscopy or such superficial characters as dropsy, &c. He will know and manage heart disease best who is quickest to perceive the effects of the valvular troubles on the whole heart, and the effects of the heart on the several organs of the frame that he may use proper caution and aid in favour of the weaker parts in due time.

CASE OF CYSTICERCUS IN ORBIT.

Alice S., æt. 14, first came under the observation of Mr. Higgens on Feb. 1st, 1876. She was a strumous child and had scars of abscesses in neck of 5 years date and others more recent. One month before had pain in right eyeball which since began to protrude. The eyeball was pushed downwards and somewhat protruded; movement upwards, nil; other movements perfect; diplopia only when looking upwards. Eye ræd, Snellen x. Optic disc was red and greatly swollen and bulging into vitreous: the veins of retina were large and tortuous, the arteries being of fair size. There was no pulsation, bruit, nor pain about the eye. It was thought probably to be some growth situated between globe and superior rectus and involving the optic nerve.

Feb. 14th, she was admitted into the Hospital. Two days previously the eye became suddenly inflamed and painful, but she had no shivering. There was considerable swelling of the upper lid, ædema of the conjunctiva, and increased impairment of mobility of globe. No constitutional disturbance. (Abscess in orbit?) An incision was made through conjunctiva, and a director passed into orbit; it came into contact with a firm resisting substance, which was incised with a narrow bladed knife but only blood escaped.

Feb. 28th. Protrusion of eyeball had increased, and Mr. Higgens made an incision through soft parts, from near inner angle of orbit to beyond outer angle, and the lachrymal gland which was pushed forward he removed. He then came upon a firm resisting growth and dissected or rather tore it away with the finger and handle of scalpel from parts adjacent. The growth appeared to be intimately connected with a muscle (superior rectus?) which had to be divided. On making a rather strong effort to detach growth with the finger it collapsed, but no escape of fluid was noticed, there was however free hæmorrhage. The collapsed remains were removed with the finger nails. The growth was found to extend quite back to apex of orbit and pressed upon optic nerve.

After removal, it was found to be a thick-walled cyst which had ruptured through a wound made by the knife. The wound in skin was closed by a few fine sutures and the margins of the lids pared and united by stitches so as to preserve the eyeball (which had escaped uninjured) from subsequent damage consequent on exposure. On more careful examination the growth was found to be made up of an outer and extremely thick cyst wall composed of inflammatory tissue, and to this a portion of muscle was adhering intimately and could not be separated. Within this external envelope was a thin pellucid cyst which separated easily, this was found to be made up of membrane composed of the peculiar serrated fibres which are characteristic of the cysticercus, there were no hooklets. The whole cyst was nearly as large as the eyeball, but its cavity, owing to the great thickness of its external envelope, was small.

Feb. 29th. Lids a good deal swollen. Incision healing by primary union; a suture removed from near outer extremity, and some blood and pus escaped. A good deal of constitutional disturbance. Poultices ordered.

March 1st. Free discharge from wound; hardly any constitutional disturbance.

March 3rd. Less swelling of lids; temperature normal, and child has had no pain or other symptoms.

March 10th. Wound almost entirely healed.

Remarks by Mr. HIGGENS.—This is an instance of a very rare disease. Cysticerci have been found within the eyeball, and also beneath the conjunctiva, but I do not remember any record of a case in which one existed deeply in the orbit. The history given probably does not go nearly as far back as the commencement of the disease. A cyst of such a thickness as that which enclosed the membrane of the hydatid must have taken many months to form. Why it gave rise to no symptoms until so lately does not appear very

evident. The inflammatory attack which occurred on the 12th of February, coupled with the fact that abscesses existed in other parts, led to the supposition that pus had formed in the orbit. It is very probable that the knife which was used to puncture the tumour did not enter its cavity, and even had it done so, the amount of contained fluid was so small that its escape would hardly have attracted notice.

The ultimate fate of the eyeball yet remains to be seen, but in all cases of removal of tumours in or about the orbit, it is well to unite the margins of the lids and thus not to allow the eyeball to remain exposed beneath the dressings.

ASPIRATION IN STRANGULATED HERNIA.

No doubt many readers were surprised on reading the abstract of Mr. Lane's paper in the last "Gazette," at the somewhat bold method which he advocated in the treatment of strangulated hernia. It must be borne in mind that in the two cases quoted, and in the other four of which he had notes, the operation of Kelotomy had been refused by the patient. The doses of croton oil given were large, but apparently not greater than necessary. The impulse which Mr. Lane has given to the consideration of the treatment of strangulated hernia otherwise than by operation, has induced the following enquiry. In respect to purgatives the general opinion of authorities is adverse. Birkett, writing in Holmes's System,* says, "they are to be avoided in all stages," and Bryant states that "a purgative is never admissable in strangulated hernia" Enemata, says Birkett, are useful in the early stage, but should not be repeated. He mentions that when treatment by purgatives has been successful in reducing the strangulated bowel, death has occurred from the exhaustion of the subsequent diarrhœa; this result nearly occurred in one of Mr. Lane's cases, the man lying comatose for many hours, ultimately recovering. It has happened in cases of intestinal obstruction where successive purgatives have been given without effect for some time, and then the bowels suddenly acting with the apparently cumulative effect of weeks of physic, that the patient's strength has been exhausted with excessive purgation; a case of this kind occurred in the Clinical Ward in the early part of this session.

Enemata have, however, been successful in many cases, and Mr. Adams brought a case of Mr. Kavanagh's before the Medical Society† in which after two injections, each consisting of castor oil, turpentine, and two quarts of olive oil, a strangulated femoral hernia was reduced with complete recovery, though stercoraceous vomiting had existed for three days. Mr. Kavanagh had treated by the same means three other cases of intestinal obstruction, where no external hernia existed.

* Vol. v. † Lancet, Nov. 1874.

In cases successful by purgation, it is thought that the whole bowel has not been nipped, or that the hernia was altogether omental. On the whole the treatment seems unsatisfactory and liable to be attended with fatal results even after the reduction of the hernia.

There is another means now extensively used on the Continent for aiding in the reduction of hernia, viz., Aspiration—which seems so successful, that we venture here to give a short resumé of the application of the Aspirator in surgical diseases, with special reference to the treatment of strangulated hernia.

There are two methods of using the Aspirator. Firstly, using the pointed canula only, introducing it beneath the skin, then exhausting and travelling in search of the fluid; secondly, using the trocar and canula, and having reached the fluid, to withdraw the trocar and attach the Aspirator. An objection to the pointed cannula alone is, that its point wounds the wall of the cyst, and blood is apt to fill the emptied space. To obviate this, a trocar and cannula have been so combined, that after the fluid has been found, the trocar is *partly* withdrawn leaving the apparatus still air-tight.

M. Dieulafoy gives 52 cases in which the Aspirator has been used to remove fluid from the knee joint. 152 punctures were made in all. The method was applied to acute and chronic cases, two deaths resulting. Dr. Rasmussen ‡ of Copenhagen, has aspirated 7 cases, 3 being operated on twice. There was no inflammatory action in any of the cases. He recommends the treatment in chronic cases, and in acute cases where there is much pain, and says the puncture should be made at the external edge of the Patella, strips of strapping being applied over the joint during the evacuation, ice should be applied. M. Gurgon § punctured the bladder 23 times in one case of enlarged prostate; this operation is suprapubic. A case is recorded || where a retroverted gravid uterus, which could not be replaced, was punctured through the rectum, two pints of clear fluid being withdrawn; this was followed by the expulsion of a five months' fœtus.

In Aspirating the pericardium, Dieulafoy recommends the puncture to be made in the 4th or 5th left intercostal space, 2—2⅓ in. from the edge of the sternum, the point passing upwards and inwards.

In most modern text books puncturing the intestine before doing Kelotomy, to assist reduction, is not mentioned. Birkett ¶ recommends, that having exposed the bowel and divided the stricture, if the gut be much distended so as to prevent reduction, it may be punctured with a fine trocar and cannula, the bowel being traversed obliquely. Dieulafoy says * the operation is an old one, but that the Aspirator was first employed to assist Taxis by M. Duplorey in 1870, and since then it has been employed 26 times

‡ British Medical Journal, 1874. p. 85. § Brit. Med. Jour., 1874, p. 706.
|| Med. Times & Gazette. 1873, p. 523. ¶ *Vide* Holmes' System.
* Lancet, Nov. 1873.

without any accident attributable to the puncture. In 20 out of the 27 cases, reduction was effected by Taxis. In 7, Kelotomy was performed, and of these, 3 died. In all these 7 there was no mark of the needle in the bowel. He states this treatment to be no more dangerous than the Taxis. Three punctures may be made without danger, and these should never be considered complete unless fæcal matter with gas escapes.

Dr. Albernese of Palermo † operated in a case of inguinal hernia which had resisted Taxis under chloroform. By the first puncture, four drachms of alkaline fluid without smell were removed, still the bowel did not return. Another puncture higher up removed five drachms with some gas. The bowel was then returned and the patient recovered.

M. Demarquay ‡ brought a successful case of Aspiration, by Bailly of Chambly, before the Society in Paris. A femoral hernia which had existed 40 years was strangulated ten hours. Taxis failed. The sac was exposed and tapped, but reduction was still impossible; the bowel was then exposed and tapped, reduction being immediately effected. The patient did well. M. Demarquay recommended Aspiration as being innocent, no gas escaping through the puncture although considerable pressure be applied. He says that Aspiration should be performed after Taxis under chloroform has failed, but should never be employed when Taxis is contra-indicated. When the bowel has been exposed in a case where *primary* Aspiration was not thought advisable, the gut should be punctured and reduction attempted before dividing the constriction.

M. Tessier § has punctured the intestine in strangulated hernia three times without success.

M. Vernevil drew 5—6 grammes from a hernia; it was reduced to half its size and easily returned, the patient recovering. He believed the sac only was punctured.

Surgeon Joshua Duke ‖ of the Bengal Medical Service, has reported two cases of strangulated hernia successfully treated by Aspiration. The first case was an inguinal hernia, strangulated about 12 hours. Taxis under chloroform having failed, No. 2 trocar and canula was passed into the swelling, the syringe applied, and five drachms of bloody serum without fæcal odour removed. After a hot bath the bowel was returned and the patient recovered. He thinks the trocar entered the sac only. His other case, also inguinal, was strangulated five days. Vomiting had existed three days; local pain and tenderness; abdomen distended; lower part of swelling livid and congested. Taxis under chloroform having failed, No. 3 exploring needle was thrust in 4 times, two ounces of dark coffee-coloured serum removed from one of the punctures, which was made low down. The bowel not being reducible, but the patient improved, a No. 2 trocar and canula was thrust in (about an hour having elapsed) and an ounce of same fluid removed; another puncture at upper part of swelling removed nothing. The bowel was now reduced, and the patient recovered. Six punctures were made and three and a half ounces removed, there being *no* fæcal odour to the fluid. He thinks the sac only was tapped as in the former case, and that the upper punctures entered omentum.

In all these cases of herniæ, except those mentioned, the trocar was passed through the skin, no operation having been attempted. In most, reduction was effected by taxis, and in the others the puncture in the intestine proved no drawback to herniotomy, no air having escaped into the sac, though considerable pressure was applied. The most important question is, shall the sac only be tapped? Kelotomy being performed if this fail. The French Surgeons incline to the affirmative on the whole, and in many cases, as Duke's, it seems sufficient; but in these cases no attempt was made to avoid the gut.

One can scarcely see why, if tapping the sac proved insufficient, the trocar should not be pushed into the intestine, as many cases testify to the innocency of such a proceeding.

The case of the woman with intestinal obstruction, (reported in another column) where the bowel was punctured through the abdominal wall, shows the benefit and harmlessness of such treatment. Demarquay * gives three cases in which he punctured the intestine for obstruction with great relief. In one of his cases there was nausea and vomiting. when the first four punctures were made to relieve distention; two days after four more were made, and all the symptoms subsided. These were made with Potaire's capillary trocar. This point has been referred to, as showing the harmlessness of pucturing the intestine with a small trocar. It must be difficult just to hit the sac without wounding the intestine; but in these cases where, after the sac had been exposed and found distended, would it not be best to puncture the sac with a small trocar? hoping that reduction would follow. And if this failed, the intestine being exposed might be aspirated, before the division of the constriction as recommended by Demarquay, or in those cases where the bowel is distended after division of the constriction, it would seem better to puncture the intestine to reduce its size, rather than submit the gut to a great deal of handling, which cannot add to the success of the operation, Many will no doubt say, that there is fear of puncturing gangrenous intestine; but the fundamental rule must be remembered not to aspirate when taxis is contra-indicated. In ordinary cases also, there are few in which the intestine is not returned, so that aspiration would be applicable to the larger majority of strangulated herniæ.

The above cases were collected, not as being a statistical record, but merely to prove the efficacy and

† Medical Times & Gazette, 1372, p. 633. ‡ § British Medical Journal, 1373, p. 537. ‖ Indian Annals of Medical Service, Jan., 1875.

* Medical Times and Gazette, 1875, page 372.

harmlessness of Aspirating the intestines. And the time seems not far off, when ths aspirator shall have its more extended use, and tapping a hernia, as Duke says, "will be placed in the same category as tapping a hydrocele or an abscess."

"X."

REMARKS ON THE WAINWRIGHT TRAGEDY.

By F. G. LARKIN, M.R.C.S.Eng.

It is with much pleasure I take up my pen in response to an invitation from the Editors of this Paper in order to contribute an essay on, perhaps, the most remarkable case ever known in medical jurisprudence.

I say "with pleasure;" but I must qualify that statement. If my humble efforts confer but a few moments interesting perusal to the readers of this "Gazette" then, indeed, the task I have undertaken becomes in the greatest sense of the word "a pleasure;" but for my own amusement and desire to circulate the fact of my association with the Wainwrights' trial further, if possible, than has already been so extensively done by the general press, I must most emphatically and at once say such is far from my wish, and for this reason, that if ever a man was inexpressibly "sick and tired" of hearing (although, without exception, I am thankful to say, in terms of praise) and talking about such an interminable case as the "Whitechapel Tragedy," it is the Writer of this article. Persons known and unknown commence this subject, and one cannot rudely answer them. My patience has never been more severely tested than by the frequent conversation in reference to this extraordinary trial.

I would particularly remind the readers that in writing this review of the medical evidence I am obliged to do it by small sections which I may well call patchwork, as any man can well understand who is engaged in general practice; therefore, if there are points omitted which ought to be discussed, I must beg the reader's leniency and ask him to accept my weak endeavours with all kindly forbearance and charitable feeling.

The medical jurist's field of practice is necessarily a very wide, as well as in most cases a very difficult one. The subject before us being a very good example of this observation; for in the first place it is not a simple case, such as that of a cut throat requiring the discrimination between a suicidal and murderous wound, but it comprehends amongst other points for investigation bullet wounds, *ante* or *post* mortem, whether self-inflicted or not; a cut throat, considered the same way; identity; lapse of time since death; and so on; all of which points of interest I propose to carefully consider in an exhaustive and yet as condensed a manner as I possibly can. In the second place, it is a difficult practice; it is an amusing fact, but nevertheless true, that I repeatedly tried to get the assistance of several men in the absence of Drs. Swaine Taylor, and Stevenson, to help me in the first investigation of these dismembered remains, but in vain,—their individual excuses being couched in some such terms as these: "No, I'd rather not," "One can't see the end of it you know," *i.e.*, that it was surrounded with difficulties. Such was the fix in which I was placed till assistance arrived from the Treasury, in the person of Mr. Bond, of Westminster Hospital, whose kindness and help I shall ever have cause to remember. I cannot speak too strongly on the importance of having one's observations confirmed by a second party so that should it be thought desirable such additional testimony might be forthcoming; this remark is of special value to *young* practitioners, for what said the counsel for the defence in addressing the jury in this particular case in reference to my evidence or portions of it? "Gentlemen, here is a young man of five years' experience, and I would have you be *very* careful as to the value you place on his evidence!"

I do not assume an extensive acquaintance with the subject of medical jurisprudence, but I suppose no one will dispute the idea that if anybody could be expected to be well informed on the special features of interest in *this* case, it ought to be either myself or my esteemed colleague engaged in the trial, Mr. Bond, considering it represents nearly 3 months thoughtfull enquiry, and that too, not to be measured by days but by sleepless nights; the anxiety in the first place that the prisoners should have the benefit of any and every reasonable doubt, and on the other hand that the interests of Justice should not in the least be neglected, was ever foremost in my mind, as anybody can well understand; for be it well remembered, of all cases in the annals of forensic medicine, perhaps there never was one in which medical evidence was of more importance than in this particular prosecution.

By way of parenthesis, I should here like to express my opinion in reference to medical defence in general, but more especially in this and similar cases of criminal prosecution. I think if I was called upon to give professional evidence for the defence of *any* case whatever, I should, *if possible*, decline to do so, and for these conscientious reasons: I think the oath which is administered to a witness (too often I fear treated with levity) should be the infallible means of binding him to give "the truth, the whole truth, and nothing but the truth." There can be but one truth, and yet over and over again do we see cases in which men go and swear diametrically opposite to one another; without mincing matters I say emphatically this acknowledged fact is a disgrace to the profession. Such was not the case however in the recent trial, I am happy to say—indeed it could not very well have occurred, the general facts being so plain; the only approach to a conflict was in reference to the subject of pregnancy, which after all amounted to nothing further than "opinion" on either side. Oft-times a medical man is forced on the defensive side of a great question against his will; such I believe was the case with Dr. Alfred Meadows, in this trial. No man can avoid a subpœna. To such an one my remarks cannot apply; but I offer the cap to the whole profession and let those wear it whom it fits. True it is, I was considered to be a witness for the prosecution, but GOD knows how eagerly I would have tendered evidence beneficial to the defence if the facts of the case and my conscience would permit it. No, we cannot too seriously appreciate our responsible position in the witness box, and remember that we are there to give evidence as to "The truth, the whole truth, and nothing but the truth, so help you GOD."

Not the least important part in a criminal prosecution is the subject of "notes." During the investigation of the case before the magistrate, Mr. Besley, counsel for the defence of Henry Wainwright, asked me for the notes which I had originally made of the post-mortem examination. The magistrate however, overruled the request by saying that such notes were never made with the idea of having any responsibility attached to them but simply for the witness's *private* assistance. The demand was repeatedly and urgently made for the "original notes," when I thought it time to settle the point by informing the court that the notes I held in my hand were only copies of the originals. It is a good plan to save the original notes, they may be of service during the trial; according to Taylor, counsel are entitled to inspect all such documents.

The most important and interesting points in this "Tragedy" must now be considered, viz., *cause of death* and *identification*.

When I was first called to see the remains at the Stones' End Police Station, on Saturday, 11th September, 1875, I was asked to say whether or no they were human remains—a question which was easily answered, as indeed was that of the sex; but the cause of death I preferred to investigate with more leisure, and accordingly, on subsequent occasions, I found the following indisputable facts (I quote from my

Report of the Case as published in the British Medical Journal of December 11th ult.): "There were large quantities of congealed blood and dirt about the head generally, but more especially in the neighbourhood of the wounds, one of which, that of the cut throat, was a wound two inches in length, which extended from the *right* side of the median line, just above the thyroid cartilage backwards, and slightly upwards to opposite the angle of the lower jaw on the *left* side, and had divided all the structures in front of the third cervical vertebra. This wound must have been inflicted during life or immediately after death, as evidenced by the congealed blood on its surface, and also in the immediate neighbourhood, especially in the direction of the ear on the same side. This wound appeared to have been continued into the body of the third cervical vertebra, and extended in a straight line across the same, including the transverse processes, cutting it nearly half through. This injury to the bone appeared to have been more recent, its surface being fresher; which fact might be accounted for by the comparative absence of atmospheric influence by the closing of the incision into the vertebra, thus pointing to the probability of its having been done at the same time as the division of the softer structures. The frontal suture was absent, all others perfect. On the right temporo-parietal suture, posteriorly, there was a fracture about three-quarters of an inch long, and three-eights of an inch wide, with its posterior part more depressed than its anterior; its direction was obliquely backwards and upwards. On the inner surface of the scalp in the immediate neighbourhood, there was a smooth layer of congealed blood, about two inches in diameter, and about one-sixteenth of an inch in thickness. On removing the skull-cap, I found a wound in the dura mater corresponding to the above fracture, in which were imbedded spiculæ of bone and slight hæmorrhage. Finding the brain in a fluid or pulpy condition, I deemed it prudent to desist from any further interference in removing it; for, had I done otherwise, my evidence would have been unconfirmed in reference to the finding of any bullet; but subsequently, with the assistance of Mr. Bond, of Westminster Hospital, I found two bullets at the base of the brain; one, which had entered by the fracture already described, had lodged itself (after having struck the posterior portion of the occipital bone) in the base of the cerebellum on the opposite side; the other bullet found within the skull was lodged in the sella Turcica, the clinoid processes of which had been broken by it; then, in following its course outwards, we found it had entered by an opening or fracture, just above and in front of the root of the right zygomatic arch. Here, also, there was a considerable quantity of congealed blood and dirt."

I have no doubt that the deceased was first shot down, and the murderer, being frightened by the convulsive muscular movement of the limbs, &c., of the unfortunate victim, immediately proceeded to extinguish even the smallest spark of life by cutting the throat. I say "spark of life;" it is a known fact that there are several cases on record where persons have lived some time after receiving a bullet wound or other equally serious injury to the brain; it is possible, but highly improbable, that it may have been so with the case before us during the short interval which existed between the bullet wounds and the cutting of the throat. The inference was drawn that these wounds were inflicted, those of the head before death, and those of the neck before or immediately afterwards, and for these reasons: first in reference to the wound behind the ear; the extravasation of blood had not only penetrated into the substance of the scalp, but also extended to such a distance underneath it and around the hole though the same as I think, quite impossible to have taken place had it been done however soon after life had become extinct; the hæmorrhage had also entered the skull and brain with spiculæ of bone in the track of the bullet for a short distance. Secondly, as to the cut throat; I maintain that this must have been done either before or immediately after death, because the surface of the wound, evidently an old one, was covered all over with a smooth layer of dried blood as well as the surrounding parts, some of which bleeding however, might, and probably did come from the bullet wounds; in addition to this may be added the not unimportant fact that on opening the stomach I found a dark layer of what appeared to be decomposed blood, but it was, as might easily be supposed, quite impossible to prove this by the microscope since the corpuscles would have long before become disintegrated by the previous action of the gastric juice, lapse of time, &c.; the colour however, was very marked; and it might possibly have been blood which had found its way there by means of the divided œsophagus. The question whether this cut throat was the result of one or two operations has been considered in the extract from the British Medical Journal; it is a very interesting point and one which I was very anxious should have been solved by some general confession from the murderer, but beyond the statement that the remains were those of Harriet Lane, he enlightened the world but a very little; if it was only one operation (including the flesh wound and the incision in the vertebra) and I am inclined to this opinion, very great force must have been used. For the defence, suicide was hinted at but the absurdity of such an imaginary possibility soon vanished; allowing for the argument that the deceased could first shoot herself and then cut her own throat, it to say the least highly improbable; but here was a case in which not only two shots had entered the brain but a third bullet very flattened was found in the padding at the back of the head, and in addition to all this the cutting of the throat was done from *right* to *left*, whereas we know that a suicide always does it from *left* to *right*, unless by-the-bye he happens to be a left-handed person, and it was not shown that such was the case with Harriet Lane.

The Medical Evidence as to *Identity* was of the utmost importance in the late trial at the Old Bailey; and in reviewing it, I must divide it into different sections and study these *seriatim* as follows:—

1.—*Were the dismembered remains parts of one and the same body?*—This question very naturally presented itself to my mind. The parts had been very roughly separated from one another, and, at places, several distinct cuts had been made before a particular extremity could be removed—this was the case more especially at the hip joint; but by great care these several lacerations could be very fairly made to correspond, and taking into consideration this fact, the general similarity of build, and the equally evident freshness of dissection, &c., there was but very little difficulty in coming to an affirmative conclusion.

2.—*Sex.*—This was very easily determined by the remains of a vagina and presence of an uterus.

3.—*Lapse of time since death* was purely a matter of presumption, and as far as I could imagine, only to be measured by months. My evidence on this point was that death had taken place from 9 to 12 months, but probably nearer 12 than 9.

4.—The *age* I gave as "about 25 years." The wisdom teeth are usually cut between the ages of 18 and 25, but innumerable instances could be brought forward where they remain for many years longer before making their appearance. Very few persons, comparatively speaking, ever cut all four *dentes sapientiæ*, but here was a case where *three were fully developed and the fourth was cutting its way through the gum*; this fact alone would show that the probable age was somewhere between 20 and 30. But to rest content with this weak argument would be, to say the least, indiscreet, and therefore, I proceeded to examine the sternum, the third and fourth pieces of which were nearly united by bone; now this takes place, according to Gray, from the 20th to 25th year, and inasmuch as these particular portions were nearly united, it would go far to prove the statement in my evidence as to age. Mr. BOND made further examination of certain epiphyses.—Therefore, taking the facts collectively, I think I was justified

in the above mentioned conclusion. If I remember rightly, the age of Harriet Lane was 24 years.

5.—*Height?*—This question was also somewhat difficult to determine, owing to the rough way in which the dissection had been accomplished, but by repeated measurements I found it to be, as near as possible, "about 5 feet." This corresponded pretty nearly with the evidence of several witnesses, who spoke to the height of Harriet Lane. Mr. BOND gave some valuable evidence as to the shrinking of the intervertebral cartilages as affecting the length of the body some considerable time after death, as in this case.

6.—The *build* of these remains was slender, so was that of Harriet Lane. A pair of boots known to have been worn by the missing woman could have been worn by the deceased, and would constitute, I think, a good fit.

7.—The *colour of the hair* of the deceased as well as that found at the grave, and on the spade supposed to have been used in exhuming the body, answered exactly to the general description given by the several witnesses for the prosecution. Moreover, they spoke as to the somewhat peculiar manner in which Harriet Lane was accustomed latterly to wear her hair at the back of the head, encircled, too, by a piece of black velvet, and this arrangement I found on the head of the deceased.

8.—The *rings* found in the grave also constituted a matter of importance, as Harriet Lane had worn similar ones. For the defence it was urged that they were too large to have been worn on the finger of the deceased, but the medical evidence went to show that the shrinking of the skin, &c., ought to be taken into account, and no doubt it was by those concerned in the responsibility of the trial. An interesting point, too, was the fact that the remaining portion of the one ear which was not wholly destroyed, showed that it had been pierced for the use of an earring; not that this is an uncommon circumstance in life, but it pointed to the fact that the deceased was not a person who had *not* worn such ornaments, and it was known that the missing young woman had worn earrings.

9.—The *decayed tooth* and the *scar on the leg*.—Sometimes there happens to be one or more marks about the body of a person by which means identification is materially assisted; such was the case with the remains found in the possession of Henry Wainwright. When I first examined them at the Police Station, I particularly noticed that the *front right upper bicuspid* was decayed down to the gum; this was the only decayed tooth, so far as it was possible to say in the absence of two missing incisors which had been removed since death. The loss of this particular bicuspid must have been evident during life in the act of laughing, &c., and the several witnesses spoke to this fact as noticed in their missing friend and relation. Of equal, if not more, importance was the remarkable scar found on the right leg just below the knee, corresponding precisely to the description given by some of the witnesses of a similar scar on the same leg of Harriet Lane, caused, it was said, by a hot poker. It was endeavoured by the defence to show that these witnesses might have seen this particular mark on the mutilated extremity when viewing the remains, or possibly having heard the Surgeons speak to finding a scar; but the medical evidence proved the perfect impossibility of this.

10.—*Were these the remains of a woman who had borne children?*—That this was a difficult question to answer there can be no doubt. Indeed, it constituted the only point of difference in the medical evidence given by myself on behalf of the prosecution and that tendered in the interests of the prisoners. Whatever value may be set upon that "difference," for, after all, it amounted to nothing more than an *opinion* on either side; and I am quite sure there is no man living who could, taking all the circumstances into consideration and beyond the possibility of doubt, *swear*, aye or nay in answer to the above question. But to give an "*opinion*" is by no means inferring a positive and infallible fact—at least such is my view. My reasons for coming to an affirmative conclusion can better be expressed by another quotation from the B. M. Jl.: "The general appearance of the uterus was most inconsistent with virginity, which fact, also, was to a great extent borne out by the appearance of the skin of the lower part of the abdomen, which here and there amidst the decomposition showed one or two white lines in the hypogastric region, and other marks nearer to and in the inguinal region, of a darker colour, apparently the remains of the peculiar violet lines which, together with the above-mentioned *lineæ albicantes*, are peculiarly characteristic when taken in conjunction with other evidence of delivery having taken place at some more or less remote period; and what seems to bear out this idea in my mind more strongly, is the fact that the decomposition had progressed more rapidly with the little *raised* portions of integument between the cicatrix-like lines than at any other part of the whole trunk, or upper part of thighs, where the surface of the skin is *even*. The dimensions of the uterus were in every way enlarged; its measurements, as near as possible, were: extreme length, 3 inches; width at fundus, 2½ inches; cervix, upper part, 1¾ inches; lower part, 1½ inches; thickness, ⅝ inch; cavity: length, 2½ inches; breadth between fallopian tubes, 1½ inches; centre, 1 inch; lower orifice, ½ inch; cervix thickness, ¾ inch; width, ⅞ inch; weight of uterus, 12 drachms."

Dr. Alfred Meadows spoke of two things which guided him more especially in coming to an opposite opinion to that given by myself. In the first place, he commented on the *shape* of the cavity of the uterus. Now, it is a singular thing that when I first examined the organ, I was struck by the very opposite shape to that which he described in the witness box, and in this respect Dr. Braxton Hicks, and Dr. Gervis, to whom I submitted the viscus, bore out my observations. However. as the uterus was very flaccid and might get altered in this respect, I confess I did not place much reliance as to the "*shape*" of the cavity in this particular case. Next, he spoke of the thinness of the walls. He said, "The walls were unusually thin." I agree with him, as will be seen by my measurement, which coincides with what Dr. Meadows said (⅝ of an inch). Now, this "thinness," I submit, in this unparalleled case taken in conjunction with the other evidence; the appearance of the abdomen, the uterine measurement, and weight, as given above, on which I rely as a *whole*, constitutes a chain of circumstantial evidence which I think ought to convince any reasonable mind that this uterus was not nulliparous. It was a most remarkable fact that the wall of the bladder was as thin, or thinner than this paper (foolscap), and the other viscera were correspondingly attenuated. All the organs had been subject to the same influence; and I should like to know why the muscular walls of the uterus should not follow the general rule of atrophy as applied to the rest of the abdominal viscera! True it is, that the uterus lasts longer than any other organ; but it does not necessarily follow that it should get thinner, in proportion, than other viscera under one and the same influence; and if my argument be sound, the fact of the uterus wasting in substance strengthens my undisputed evidence as to weight and measurements. For of course, immediately after death the uterus must have been heavier, and probably the dimensions somewhat greater then when I made the first post-mortem examination; and comparing them with the generally accepted measurements of the *nulliparous* uterus of an adult I could come to no other conscientious conclusion but that these were the remains of a *multiparous* woman, which "*opinion*" was fully confirmed by the subsequent confession of the culprit that these were the remains of Harriet Louisa Lane.

OBSTETRICS.

TWO CASES OF TRANSFUSION.—(Both fatal.)

E. N., 22, having passed through an ordinary labour, was

delivered of her first child on September 18th, 1875, at 9 a.m. There was considerable flooding after the birth of the child, caused by adherence of the placenta, which had to be removed. The uterus contracted firmly after the placenta was taken away (a dose of ergot having previously been given), and no more bleeding occurred. About two pints had been lost altogether. The pulse was 130 and weak but regular, face very much blanched, intellect clear. The pulse became weaker and a mixture containing Ammonia, Brandy and Opium was given every ten minutes. At 11 p.m., the pulse being very weak, the respiration sighing and the restlessness severe, it was decided to transfuse. The blood which the woman had lost was collected (it having been ascertained that the vessel was perfectly clean) and strained through washed muslin. About six ounces were obtained. The pulse could now scarcely be felt and the woman was sinking. Aveling's apparatus was used and the strained blood injected, the woman being very restless all the while. No bad effect was produced, and but little good. An ordinary saline fluid was now substituted for the blood, but when about six ounces had been injected, the Aveling got out of order and some air entered the ball, consequently the operation had to be suspended. No positive effect was produced by the injection; the woman gradually sank and died at 2 p.m.

L. M., 19. First confinement on September 2nd, being about seven months' pregnant. She stated that a show of blood had followed a pain in the abdomen. The os was completely closed. The next day she remained about the same, having lost no more blood. The following day there was another slight loss. Accidental hæmorrhage was feared and the patient kept quiet. The next day (the third) labour pains set in, and when the "Charity" arrived the placenta was found expelled, the child being still *in utero*, a leg presenting—a dead child was extracted. The woman was faint and the pulse 140, though not much blood had been lost. The pulse came down to 105. About three hours after delivery she became worse and almost pulseless. One slight gush of blood had occurred since delivery. A saline fluid was transfused, but the patient died just after the last portion of the fluid was injected.

RUPTURED UTERUS.—(Death.)

J. R., 41. Eleventh confinement. Labour set in at 1 a.m. on December 6th, 1875. Pains continued strong up to 8 a.m., when they quietly ceased, and the pulse rose to 120. At 10·30 a.m. the pulse was small and weak, the abdomen tender. No presentation could be made out even with the hand in the vagina. Under Chloroform, a rent was detected in the posterior wall involving the upper part of vagina and neck of uterus. A foot was brought down through the rent and the body delivered. The head being arrested was perforated, and delivered. The placenta immediately followed. The uterus contracted firmly. As the operation proceeded the patient gradually became weaker, and died five minutes after the extraction of the child. Some fæces appeared in the vagina, indicating ruptured intestine.

Electrifying Room.

REPORT ON CASES TREATED IN THE ELECTRIFYING ROOM, FROM 1864 TO 1875 INCLUSIVE.

By R. J. PYE-SMITH, and J. H. SANDY.

Continued from page 22.

PARALYSIS OF MUSCLES OF THE UPPER EXTREMITY (PERIPHERAL).—Of tThis class 60 cases are reported. In 6 cases the shoulder was affected; in 41, the arm or forearm; and in 13, the hand or fingers; in 2 instances, both sides were involved; in 9, the left; In 9, the side is not stated; and in 40 cases, the right side was affected. This large proportion being probably due to the greater liability to injury of the right upper extremity.

The cases may be divided into three classes. First, *paralysis due to pressure on nerves* (13 cases); in 6, the pressure was occasioned by crutches; in 2, by splints; and in 5, by the head resting on the arm in sleep.

The average duration of the paralysis was three weeks; the extremes, one week and six weeks. The average treatment lasted one month; the extremes, one week and three months. Five cases were treated by Faradism, 3 being cured, and 2 improved. Eight cases were treated by Galvanism, 3 were cured, 3 improved, and 2 not improved.

Second, *paralysis due to injury* (22 cases). Eight were falls, 2 cuts dividing the ulnar nerve, and 12 various other injuries. The average duration was six months; the extremes, two weeks and six years. The treatment averaged three months, the extremes being one week and ten months. Of 4 treated by Faradism, 3 were cured, and 1 not improved. Of 18 treated by Galvanism, 6 were cured, and 12 improved.

Thus, out of 35 traumatic cases 3 only did not improve under treatment, Faradism and Galvanism being nearly equally successful. Although the proportion of cases "cured" was considerably greater under Faradism than under Galvanism, the majority of those reckoned "improved" were originally entered "much improved," and were nearly all Galvanised.

In numerous cases following injury during the Civil War in America, MITCHELL found Faradism the best treatment. He advises its early application, although improvement does not take place for many months; viz., after union of the divided nerve. ALTHANS, finds both Faradism and Galvanism useful in cases due to pressure. REYNOLDS prefers Galvanism. And TIBBITS, Faradism in most of these peripheral cases.

Third, *paralysis due to various causes*—usually not stated—(25 cases). Average duration, three months; extremes, one week and five years. Treatment, average, one month, extremes, one week and three months. Treated by Faradism, Eight cases, 4 cured, 1 improved, 3 not improved. By Galvanism, 17 cases, 9 cured (2 by Dr. Poore's method), 4 improved, 4 not improved.

PARALYSIS OF MUSCLES OF THE LOWER EXTREMITY (PERIPHERAL) Of 58 cases, 10 only are reported. One side only was affected in every case. Three were due to falls, and were improved by treatment; no cause is assigned in the remaining cases. The average duration was seven months; the extremes, six weeks and fifteen months. The average period of treatment was two months; the extremes, one week and eight months. Five cases were treated by Faradism, one was cured, and 4 were improved, Five were treated by Galvanism, one cured, 1 improved, and 3 not improved.

If we may judge at all from so few cases, Galvanism would thus appear to be less successful than Faradism.

LEAD PALSY.—Of this affection 37 cases are reported. In nearly all instances both forearms were affected. The average duration of the affection before treatment was four months, the extremes being two weeks and two years. The average duration of treatment was three months, the extremes one week and ten months. Three cases only were treated by Faradism as the muscles rarely respond at first to the induced current, but 2 of of these cases were cured and the remaining 1 improved. Thirty-four were treated by Galvanism, and of these 12 were cured, 19 improved, and 3 not improved.

Most authorities agree that Galvanism is on the whole the best treatment, but many of them advise the substitution of Faradism as soon as the muscles will respond to it, and the above cases of cure under that current from the first seem to show (as in the similar cases of facial palsy) that Faradism may cure even when it fails to produce muscular contraction. Of the three cases which were not benefited by treatment, two attended for only one week, and the third for one month.

Altogether, the success in the treatment of lead palsy by Electricity must be considered striking and satisfactory.

INFANTILE PARALYSIS.—Under this head, 23 cases are reported. They all occurred in children under twelve years old, the average age being three years, and the extremes, one year and eleven years. In 20 cases the lower extremity was affected, in 4 the upper (in 1 case both legs and one arm being involved). In 13 cases the right side, in 9 the left side, and in 1 both sides were affected. The average duration of the paralysis was eighteen months, the extremes two months and ten years. The average length of treatment was four months, the extremes two weeks and ten months. Faradism was applied in 4 cases, 3 being improved, and 1 not improved.

In these cases, as in lead palsy, the Faradic current rarely produced any muscular contraction. The Galvanic current sometimes acts readily upon the muscles, but more frequently it fails to excite them. REYNOLDS, and following him, ALTHAVS, advised Galvanism to be used at first and afterwards either instead of, or alternately with the Faradism. Though it is rare for these cases to be cured, the above figures show that improvement may generally be looked for.

To be continued.

HODGEN'S SPLINT.

Some weeks ago we published a description of an improvement by Mr. BRENCHLEY on Hodgen's splint, consisting of one continuous piece of flannel to form the bottom of the trough in which the leg rests, instead of the strips of bandage originally used.

Mr. DAVIS has lately made an addition, through which the splint has considerable lateral movement, so that the patient is able to lie to some extent upon either side.

Two bars of wood, about the size of stout fire-wood, have a hole bored at each end and a third in the middle; the end of a short piece of cord tied round a pulley is passed through the hole in the middle and knotted, so that it will not pull through. Cords about 6 inches long, are now passed through the holes at the ends of the bars, and after being knotted at the ends as not to slip through, are tied on to the hooks at the sides of the splint. A cord is now passed through the pulleys and the limb swung up in the usual way.

The outermost holes should be the same distance apart as the hooks are, to which their cords are tied. The advantage of the lateral movement is seen in the following cases:—Case 1. An old woman, æt 80, with fracture of the shaft 18 days old, complained greatly of having to lie flat upon her back, and had threatening bed-sore; this apparatus was applied, she immediately expressed herself as feeling much more comfortable being able to turn on her sides, appearances of bed-sore soon left, and in 3 weeks she left the hospital in a Bavarian splint.

Case 2.—A boy, æt. 16, with recent fracture of the shaft, with this apparatus was at once able to turn to a great extent on either side.

Any tendency to rotation of the limb, may be corrected by rotating bands of strapping passed round the leg, and their ends turned round the wires and pinned.

A case of fractured thigh, put up in this method, is now in Cornelius 6. There is another in Accident 1, but here the strips of bandages are used, and not the flannel.

Medical Cases.

APHASIA.

T. E., æt. 49, was admitted into Stephen under Dr. WILKS on Sept. 11th, 1875. His previous history was good, but he had been intemperate, he had had much headache for 2 weeks, and then one day he suddenly lost his speech, but had no hemiplegia, with this he was also very violent, so that he was at first thought to be quite maniacal. When admitted he was quite aphasic, could not say any word properly, and complained much of frontal headache, especially on the left side. His urine was albuminous, and contained some blood and pus cells, (but he had a stricture), s.g. was 1020. Heart and lungs normal. There were no signs of paralysis, but he had much sleeplessness. He was ordered Pulv. Doveri at night, and his urinary trouble was treated.

He remained in much the same condition for a week, when signs of improvement set in, he could read and write a few words, and this continued. He said he could think collectively but was unable to express himself altogether clearly. On the 27th, the report stated that he answered at times intelligently and at other times talked nonsense. He had no memory, and if he left off reading for an instant, he could not say what he had been reading. On the 4th of Oct., he left the hospital in much the same condition.

He remained pretty well until beginning of Dec., when his memory became weaker, his speech thick, and he had some loss of power and control over right arm and leg. A week after this on Dec. 18th, he was re-admitted. He then spoke thickly and forgot words in conversation, there was no paralysis of the tongue, but some drawing of face to left, and slight loss of motion and sensation in right arm and leg. He recovered in 4 days, and remained better until January 2nd, 1876, when a kind of stupor came on, and he had a sensation of numbness in his left hand and foot, and the headache became worse. This headache which was entirely frontal, became severe, and was always worse when he awoke, although he had it less severeally continually, otherwise he improved considerably, could speak well and was well in health, and was consequently discharged on January 22nd.

James Pardoe, æt. 66, was brought to the hospital about noon on Dec. 1st, 1875. The two friends who accompanied him said they had known him for several years, but did not know of any previous illness. He had certainly never had any attack resembling the present, he had been a temperate man. On his recovery he said he had had much trouble and anxiety lately.

His appearance was fairly healthy, although somewhat anemic. His manner was somewhat confused, although he evidently understood what was said. When asked if he could walk alone, he immediately rose and walked a short distance, at first he seemed only able to say the word 'Home" which he did when anything was said to him about remaining in the hospital. A few minutes later he repeated the word "yes" and "no" and then used them to answer questions. In a short time after some hesitation, he wrote his name, age, and date of his birth correctly. When he was asked how the attack came on, he wrote "Come sudden this morning" yet he could not speak the same. He was left alone for about ¾ hour, and at the expiration of that time he had completly recovered, and in the course of the afternoon went out.

CHRONIC INTESTINAL OBSTRUCTION.—MALIGNANT STRICTURE OF DESCENDING COLON.—OVARIAN TUMOUR.—(Death.)

Z. G., æt. 46, married, no family. Admitted April, 1875, with colicky pains in abdomen which was distended and tympanitic. Passage of loose fæces, and obvious excessive peristalsis. Relieved by end of June, but re-admitted within 3 weeks with return of her symptoms and with constipation, which did not yield to enemata. August 1st, acupuncture of intestine in five places. No escape externally of gas, but followed by passage of much wind and some fæces per anum, and rapid subsidence of the tympanitic distension. Then free action of bowels and improvement in general condition. September 7th, ovarian tumour discovered in hypogastric region. Nov. 7th, discharged for second time quite relieved. Dec. 29, admitted for third time. Since discharge

abdomen had continued to enlarge slowly. Bowels regular. No sickness. Great distension. An elastic tumour to be felt lying between the umbilicus and pubes, extending to the left iliac region, but more to right iliac. Uniform distension of abdomen, except when a tympanitic swelling arises in left iliac fossa. Jan. 18th, she has been taking Belladonna and Nux Vomica and bowels have been fairly open till the last few days, during which soap and water enemata have been used. Ordered Scammonii gr. ij. pil: col: gr. vi. hac nocte.

19th, in more pain and abdomen more distended.

20th, Bowels open but still in great pain. In the evening she suddenly vomited and then fell back and presently expired.

Post-mortem.—Commencing peritonitis. Small and large intestines very greatly distended. Malignant sticture confined to the interior of the bowel was situated at the splenic flexure, so small as to admit little more than a No. 12 catheter. Secondary deposits as isolated nodules in the mesentery. Secondary deposits in Liver. Unilocular Cystic Ovary with new growths on its interior. Vomited matter in the smallest bronchial tubes.

DISSEMINATION OF FIBRO-SARCOMATA.—(No primary seat.)

John S., æt. 50, admitted on December 23rd, 1875 He was much emaciated and in a state of great prostration, though no localised organic lesion was indicated by the usual objective signs. After he had been in a week or more it was discovered that he had a number of little hard tumours scattered over his trunk and arms, and these increased in number while he was under our observation. They were, for the most part, moveable over the deeper structures, and the skin was moveable over some of them. The size varied from that of a shot to a large pea. Up to the time of death, no new symptom developed, only he became more apathetic and delirious towards the close.

POST-MORTEM, Feb. 2nd.

Brain.—Relic of old contusion on under surface of frontal lobes—no growth.

Lungs.—Small isolated patches of deposit scattered over pleural surfaces of both lungs, extending a little into lung tissue. No separate nodules apparently within the lungs which did not reach the surface, except what had travelled in along pulmonary arteries or bronchi.

Heart.—In the loose cellular tissue about the aorta and pericardium were nodules, rounded, hard and white, while the heart itself was affected similarly to the lungs.

Abdominal Organs.—Liver free. In the omentum and mesentery, same growths as in the mediastinum. In the kidneys there were some small nodules which did not reach the surface.

Growth of same nature in subcutaneous tissue and superficial muscles.

Microscopical examination showed the tumours to be composed of well organized fibres with spindle cells.

IDIOPATHIC ANÆMIA.

PHILIP, 32.

E., æt. 21, of Gravesend. Admitted Jan. 28th, 1876.

The patient was one of the chief clerks in a large firm. Two sisters suffered at the same age from somewhat similar symptoms (Chlorosis ?)

Never had any serious illness, he always enjoyed fair health until Dec. last, but had always been rather pale and thin, and could never stand much exertion. During the last few years he was occasionally subject to slight attacks of epitaxis but never lost much blood at any time. He was not subject to fainting.

The illness for which he was admitted commenced quite suddenly in the first week of last Dec., six weeks before. One evening after dancing he felt severe pains over his left hip joint, next morning found himself too weak and ill to go to business, he stayed at home for ten days, then feeling a little better went for two, he was too weak to walk and had to take a cab, he was however unable to attend to his work and remained confined to his room till he entered the Hospital. During the first six weeks of his illness he suffered from dull aching pains shifting about his body but chiefly affecting his back and thighs, they were never very acute.

On these occasions he saturated two handkerchiefs with blood from his nose, two or three times he had a peculiar oppressive sensation on his chest, causing him to gasp for breath. He lost flesh and became much paler, his appetite remained good, his bowels regular, and motions normal. He had no shivering nor vomiting. His urine became whitish and thick when allowed to stand. The chief thing he suffered from was excessive weakness.

When admitted patient was tall, very thin, very pale, looking as if blanched from hæmorrhage, he was so weak he could scarcely stand.

Skin hot and moist, tongue pale and furred, lips and gums very pale. The hepatic dulness slightly increased.

The chest shallow, lungs resonant throughout.

No pericardial dulness, heart's impulse diffused, sounds distinct and short. Pulse 138 small, compressible, regular. There was pulsation all over the epigastric angle, most forcible on the left of the median line, with the unaided ear it was heard to be accompanied by a loud thudding sonnd, which, on using the stethoscope, was changed to a loud rushing murmur. The cardiac sounds were audible each side of the spine, loudest on the left side. The 11th intercostal space pulsated strongly, and over it both sounds were as distinct as in the front of the chest; the pulsation here was continuous round the side with that in the epigastrium.

Loud venous murmurs were heard on both sides of the neck. Temperature, 100·8°; Pulse, 138; Respiration, 20.

On the 29th, he had epistaxis in the morning, saturating two handkerchiefs. The blood on them seemed poor and diluted; the microscopic appearance of some taken from the finger was normal, there was no increase of white cells.

30th, he fainted on rising for the nurse to make the bed. Digitalis. ℥x. Ferri Perchlor. ℥x. Aqua Camp. ℥ j.

31st, Feb. 1st, 2nd, 3rd, and 4th, he suffered much from pain shifting about his body and he became weaker on those days. Temperature, morning, 99°; evening, 100°; pulse, 120.

5th, he seemed much better, on rising he did not feel faint, appetite better, tongue clean, bowels comfortable.

6th, epistaxis in the morning, it began again at 3 in in the afternoon and continued slowly trickling till 10 p.m., when he felt very weak and faint. Pulse, 130, very feeble, pupils contracted. R. Acidi Gallici grain x, Sp. Chloroformi ℥x, Aquæ ℥ j, 4 tis horis.

7th, temperature 99.2°, pulse 126 feeble. He was excessively weak, the pallor, if possible, seemed increased. From this time he became faint on sitting up in bed, and was quite unable to stand.

8th, 9th, 10th, there was much retching and sickness on these mornings, his appetite failed, bowels relaxed, he seemed to be getting thinner, on the latter day a loud systolic bruit became audible all over the cardiac region, it was loudest on the right of the sternum; and a sound like a small pericardial rub washeard just below the left nipple. R.Træ.Ferri Perchlor. ℥xv. Sucei Limonis ℥ j. Sp. Chloroformi ℥x. Aquæ ad. ℥ jss.

During the night of 10th, he had much distressing retching. On the 11th, at 10 a.m., he seemed half asleep, answered questions with difficulty and hesitation, he was very restless and tossed himself about in bed, he said he felt giddy and drowsy, but was free from pain. Tongue brown and dry, much thirst.

The pulsation in the epigastrium was much more forcible. Temperature 97·5°, respiration 24, pulse 140, small, very weak and thread-like. R- Sp. Vini Gallici ℥ ij, Mist. Ammoniæ ℥ ss, Træ. Digitalis ℥x, 2 bus horis.

At 2 p.m., he was quite unconscious, restlessness increased, his pupils were widely dilated and he stared about vacantly. Temperature 97·5°, respiration 40, the radial pulse was so

faint it could not be counted. At 3 p.m., pulse scarcely perceptible, breathing very feeble, he now lay quite still. Mr. Clark injected about 8 ounces of defibrinated blood into the median basilic vein of the right arm, patient was quite insensible to pain. After the operation the breathing for a few minutes seemed to improve and he moved about a little, but there was no very marked effect. The extremities became cold, and patient slowly and quietly sank at about 3-30.

While in the Hospital he had such nourishing diet as he could take, as milk, eggs, chicken, porter, &c., but neither food nor medicine had the slightest effect in checking the progress of the disease.

After death the brain was found to be very anæmic, but otherwise healthy. The lungs were very bloodless and rather emphysematous. There was no displacement of the least to account for the pulsation behind.

Its visceral surface was much ecchymosed especially the anterior surface of the right ventricle. The musculi papillares of the mitral showed the "Tabby-cat" striation very markedly, on cutting into their substance, the whole thickness of each was yellow in color, contrasting strongly with the rest of the adjacent ventricular wall. The surface of the septum was yellow, but the colon was quite superficial. The cavities of the heart were quite empty, except that the right ventricle contained a little clot no larger than a sixpenny piece. The valves were healthy, the vessels also. The liver weighed 71 ounces, it was rather pale and minutely mottled with yellow dots, looking like fatty change in the centre of the lobules; its tissue was firm. The spleen weighed 10 ounces, it appeared healthy. Kidneys 12 ounces, tbey were pale and appeared healthy, except that scattered over the centre was a number of small whitish patches about the size of a rice grain, none of them raised above the surface, others looked merely like small spots of the tissue paler than the rest, one as large as a pea was very vascular and looked ecchymosed.

Medical Wards.

SCARLATINAL DROPSY.—URÆMIA.—VENESECTION. (Recovery).

MARY, 4.

J. M., æt. 7. Family history. Father had dropsy when 14 years of age. Mother quite healthy. No rheumatism.

Patient has never had Rheumatism. Since birth has had a good deal of Cyanosis, especially after running or coming down stairs. Had measles 4 years ago. Has always been a delicate child.

Present illness. On 28th of December, patient was laid up with Scarlet fever. Came down stairs for the first time on 22nd of January, when she went out, and the same evening her lower eyelids and cheeks began to swell. On 28th, she was admitted in here with general dropsy.

On Admission.—Countenance pasty; Conjunctivæ swollen, and Œdematous; legs, arms, and body swollen to some extent; fingers bloodless, tips purple; lips are also blue.

Abdomen is swollen, and there is distinct fluctuation and gravitation of fluid, Bowels open.

Loud Rhonchus and Crepitation heard all over chest, both anteriorly and posteriorly.

Heart.—Dulness extending from second rib downwards. Loud bruit heard over second left Intercostal space, also in axilla and behind. Heard loudest over Pulmonary valves, runs along the pulmonary artery, towards the axilla. Distinct thrill felt.

Urine.—Scanty, highly albuminous, sp. gr. 1018.

Jan. 26th, In the evening patient was attacked with convulsions. Venesection ad. ℥ iii. whilst in warm bath. In spite of this treatment the convulsions continued, after half an hour, Chloroform was administered, patient slept quietly till 10 o'clock next morning, when the convulsions returned. Venesection to ℥ vi. Ten minutes after the bleeding, patient was quiet and has from that time been gradually recovering.

Jan. 30th, Urine still albuminous ¼. Patient improving. Pulv. Jalapæ Co. gr. x o.m.

Feb. 8th. No albumen. Patient well.

When bleeding is performed in uræmic convulsions, it should be done effectually, as most probably the cause of failure to relieve symptoms in the first operation in this case was owing to too little blood being removed. The child immediately after the second venesection showing signs of improvement.

[We are indebted to Mr. RENDALL for the above.]

General.

CÆSARIAN SECTION.—The *Gazette Médicale de Paris*, of Nov. 27, records a case of Cæsarian section, which occurred in the hospital practice of Dr. Bardy-Delisle, of Périgueux. The patient was nineteen years of age, at the full term of pregnancy, and suffered from a considerable deformity of the pelvis, sacro-pubic diameter measuring rather less than two inches. The uterine wound was not stitched. The second day after the operation the pulse rose to 150, and bilious vomiting set in, with abdominal tenderness, in fact all the symtoms of peritonitis. On the fifth day a great quantity of inodorous serous fluid escaped from the abdominal wound, some of the silver wire sutures had given way, and there was a tendency to hernia. The condition of the patient gradually improved, and she left the hospital two months afterwards perfectly recovered. Dr. Bardy-Delisle attributes the recovery from the severe febrile attack to the quantity of nutritious food, wine, and tonics which were administered. The child, to all appearance strong and healthy, was after extraction handed to an attendant, who, with a view of favouring respiration, conceived the absurd idea of opening a window close by. The result was that on the sixth day death from pneumonia occurred, the diagnosis of which was confined by the autopsy. As far as the operation was concerned, therefore, it may be looked upon as a perfect success both to mother and child.

For the last five years torsion has been the only means used at the Gloucester Infirmary, for closing bleeding vessels during operations and otherwise. This method has been adopted in the Femoral and other large arteries, and *no* case of Secondary Hæmorrhage has occurred.

Last year no prize was awarded by the Royal College of Surgeons for the Jacksonian Essay. This year there have been no Essays sent in.

ST. OLAVE'S UNION.—APPOINTMENT OF NURSES.—The Guardians of the above-named Union, REQUIRE for their Infirmary at Rotherithe THREE ASSISTANT DAY NURSES and TWO ASSISTANT NIGHT NURSES, at salaries commencing at 15*l.* per annum, and increasing 1*l.* yearly to a maximium of 20*l.* each, together with rations, lodging, and w shing. Applications in candidate's own handwriting, stating age and present and previous occupations, accompanied by not more than four testimonials, of recent date, must be sent to me on or before Wednesday, the 15th March instant. Candidates must attend a meeting of the Guardians to be held at th Board-room of the Workhouse, in Russell Street, Bermondsey, on Thursday, the 16th March inst., at Three o'clock in the Afternoon, when t is proposed to proceed to the election, but no expenses will be allowed. The appointments will be subject to the approval of the Local Government Board.—By order, JOHN G. HAWKINS, Clerk.

Clerk's Offices, Russell Street, Bermondsey, March 2, 1876.

CLINICAL THERMOMETERS.

With clear black burnt-in divisions, which cannot be effaced or rubbed out.

THE STANDARD CLINICAL THERMOMETER, by which all others may be tested at any part of their graduations 0 10 6
THE HOSPITAL CLINICAL THERMOMETER, clear, distinct, and correct 0 6 6
THE PATENT CLINICAL THERMOMETER, with Indestructible Index, which cannot be shaken into the bulb 0 15 0
Kew Certificates from the Royal Kew Observatory may be had with any of the above at 1/6 extra.
THE IMPROVED PATENT PORTABLE SPIROMETER 5 10 0

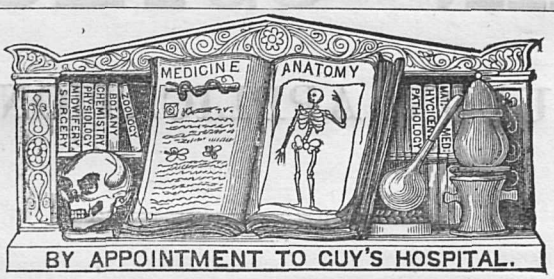
L. CASELLA, 147, Holborn Bars, London, E.C.

LIBERAL TERMS ALLOWED TO AGENTS AND ON WHOLESALE ORDERS.

3d. IN THE 1s.

DISCOUNT OFF

MEDICAL BOOKS.



BY APPOINTMENT TO GUY'S HOSPITAL.

MEDICAL BOOKS BOUGHT OR TAKEN IN EXCHANGE.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

A Set of Quain & Wilson's Anatomical Plates—Coloured—(Published £10 10s.) For Sale Cheap.

TO STUDENTS.—FIRST-CLASS SURGICAL INSTRUMENTS.

The CHEAPEST HOUSE in LONDON is C. BAKER'S, 244 & 245, High Holborn.

Every article is warranted of the best manufacture.

STETHOSCOPES, every variety, from 2s. each.
DISSECTING CASES, in Ivory Handles, from 16s. 6d. the set.
DISSECTING CASES, in Ebony Handles, from 10s. 6d. the set.
POCKET DRESSING CASES, from 15s. 6d.
MIDWIFERY FORCEPS, 10s. 6d.
STOMACH-PUMP with ENEMA combined, 21s.
POCKET MIDWIFERY CASE, 8s. 6d.
OPHTHALMOSCOPES, for the Pocket, from 6s. 6d.
LIEBREICH'S, ditto, 14s. 6d.
LARYNGOSCOPE, complete in Case, from 25s.
TOOTH FORCEPS, Tomes', all kinds, 5s. 6d. each.
Ditto Clendon's, ditto, 4s. each.
FERGUSSON'S SPECULA, all kinds, 3s. each.
SILVER-PLATED CATHETERS, from 1s. 9d.
HYPODERMIC SYRINGES, from 6s. 6d.
URINOMETERS, from 2s. 6d.

The Self-Registering Clinical Thermometer,

In Case, complete, 3 inch, 5 inch, or 6 inch, at 6s. each.

Catalogues free by post.—Second-hand Surgical Instruments of all kinds kept in stock.

STUDENTS' MICROSCOPES, £3 3s.—C. BAKER'S Students' Microscopes have all the latest improvements, with object-glasses which will define the most delicate pathological structure. Complete, in case, £3 3s.
INJECTED and other PATHOLOGICAL OBJECTS, from 1s. 3d. each. MATERIALS and APPARATUS for MOUNTING of every kind.
Catalogues free by post. Observe—244 & 245, HIGH HOLBORN.

MICROSCOPES AND APPARATUS OF EVERY DESCRIPTION.

GLASS SLIPS, COVERING GLASS, CLIPS, LABELS, OBJECT BOXES AND CABINETS, DROPPING TUBES, MOUNTING FLUIDS, &c., &c.

CLINICAL THERMOMETERS 7s. 6d. & 9s.

IN METAL CASES TO PROPEL AS PENCIL, 15s.

STANLEY, Optician,

13, RAILWAY APPROACH,

LONDON BRIDGE, S.E.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine, and Surgery.

NEW SERIES.—No. 4. APRIL, 1876. SIXPENCE.

CONTENTS.

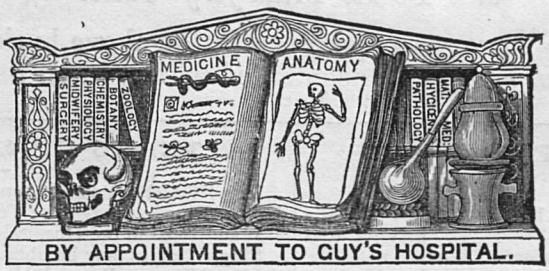
Clinical Medicine	39	Notes of 51 Cases of Aortic Aneurism	46
Notes of a Clinical Lecture on Cataract	40	The Surgery	47
Report of the Eye Wards	42	Surgical Cases	48
Obstetrics	42	Football	48
Royal College of Physicians, London	43	Conversation	49
Royal College of Surgeons	43	Correspondence	50
Leading Articles	44	On Duty for April	50
Physical Society	44	General	50

3d. IN THE 1s. DISCOUNT OFF MEDICAL BOOKS.

JUST READY.

Mr. BRYANT'S SURGERY,

2 VOLS., 19s.



NOW READY.

QUAIN'S ANATOMY

2 VOLS., 24s.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

BOOKS BOUGHT OR TAKEN IN EXCHANGE.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

LONDON UNIVERSITY.

The following Examiners have been appointed for the year:—*Experimental Philosophy.*—Professors Reinold and Balfour Stewart. *Chemistry.*—Professor Roscoe and Dr. Russell. *Botany.*—Rev. M. J. Berkeley and Dr. Masters. *Medicine.*—Dr. Wilson Fox and Dr. Murchison. *Surgery.*—Messrs. Marshall and Savory. *Anatomy.*—Messrs. Callender and Ellis. *Physiology.*—Dr. Allman and Dr. Rutherford. *Obstetric Medicine.*—Dr. Hall Davis and Dr. W. S. Playfair. *Materia Medica, &c.*—Dr. Brunton and Dr. Ringer. *Forensic Medicine.*—Dr. Gamgee and Dr. Maudsley.

TERMS OF SUBSCRIPTION.

The "Gazette" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to H. DAVY, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Medicine.

Dr. Moxon began by saying that there were at that time in Clinical Ward, one case which was certainly diphtheria; one which was doubtful, and a third which was certainly not diphtheria.

There are 3 groups of cases:

(1) Those cases which ought not to be mistaken for diphtheria.

(2) Those which cannot be distinguished from diphtheria.

(3) True diphtheria.

Three diseases of the mouth may come under the first heading:

(*a*) Simple aphthous stomatitis, which occurs in children and in nursing women, lasting a few days, easily cured.

(*b*) Ulcerative stomatitis. There is a case of this now in Clinical. The patient, a sickly delicate child, 6 years old, who has been complaining of pain in the throat and cannot take much food. There is a creamy thick deposit on the anterior parts of the inside of the mouth there are ulcers along the margins of the gums; pharynx is free, submaxillary glands swollen, no rash on body, bowels confined, urine contains no albumen.

This disease used to be confounded with diphtheria, and is still by some.

It differs in several points however; *e.g.*, it is curable by different means, being almost invariably quickly cured by Chlorate of Potash. Also the fauces are clean. It sometimes occurs epidemically.

This disease is often produced by mercurial poisoning: there is in this case always fœtor of the breath. If not treated it may run on to necrosis of the jaw.

(*c*) Parasitic thrush. This occurs in ill-nourished children or very much exhausted bedridden people. The way it arises is as follows: through deficient use of the masticatory apparatus an insufficient amount of the alkaline saliva is poured out; the fluid in the mouth becomes acid, acid fermentation takes place in the milk and other food, and a fungus developes. This constitutes parasitic thrush.

All these three diseases do not reach the fauces as a rule, though they may in the course of the disease pass into the pharynx, they only spread in positions where squamous epithelium is present.

Diphtheria never affects the front of the mouth.

If the above diseases exist in infants the only cure for them is to get them a wet nurse, otherwise they may die.

Simple sore throat much resembles diphtheria. There are four varieties of sore throat: follicular, herpetic, granular, erysipelatous; these produce no white patches on the throat.

Chronic sore throat.—In this disease white patches form on the tonsils in the lacunæ; it may be called "lacunar tonsillitis." If a person affected with chronic sore throat get an acute attack in addition it may puzzle one much to decide whether diphtheria is present or not.

(2) The second group of cases are those which cannot be distinguished from diphtheria. In these the diphtheria or the condition resembling it is a complication. A case was mentioned as occurring in the course of what appeared to be typhoid fever.

The above difficulty may arise in cases of scarlatina; after a period of apparently natural scarlatina there is found an appearauce like that of diphtheria; there is albumen in the urine.

Is this true diphtheria or a pellicular inflammation of the throat on the top of scarlatina? No one as a rule can answer this question, but it does happen that in such a state of things true diphtheria occurs in the nurses and others, when the case is cleared up.

(3) True diphtheria. Of this there is a case in Clinical now. A girl aged 24, good family history, had enjoyed good health previously. She complained, for a week before admission, of thirst and of feeling tired; swelling on the side of the neck a day before admission. She is a pale stout woman; has œdema of ankles and eyelids, neck swollen, tonsils and uvula inflamed, with a white patch on each tonsil. *Urine* s.g. 1021 turbid, albumen one third. Temperature 99°. Systolic bruit heard.

The next day the throat was not so sore and she was better. Urine still highly albuminous. During the next few days she improved greatly, though the amount of albumen in the urine remained as before.

Physicians agree to divide diphtheria into *mild*, *severe*, *gangrenous*. It is a disease which is very irregular in onset and is a most treacherous one; the best measure of the severity is the size of the throat outside; in mild cases the glands are slightly enlarged.

The common course of the disease is that the patient feels a difficulty in swallowing, perhaps a sudden feeling of stiffness and pain in the neck, or he feels ill all over. This condition may last from 6 hours to 3 days, sometimes sudden illness is seen and there is often an erythematous blush all over the throat; at first one side is affected, always both sides before the end. In 24 hours there is nearly always the diphtheritic patch on tonsils close to the mouths of the follicles, these spread to fauces and palate, moderate swelling of glands, loss of appetite.

Treatment.—The best thing is to leave the throat almost alone; allow the patient to gargle with warm water or a little Chlorate of Potash.

In the treatment we must remember that it is not only the throat that is affected; close to the tonsils are important parts, the vagus and other nerves and vessels. We can well understand how likely we are to get much depression, these important structures being bathed often in unhealthy purulent matter.

In severe cases the onset is similar, the fever higher, the temperature is perhaps up to 105°; though this may mean little in children.

If the throat quickly gets coated and these patches spread much then the case is of great severity.

There is generally much fœtor of the breath unless great care is taken in nursing; also great swelling of the parts around, and œdema. During the first and second days a good deal of the white matter is deposited; by the 4th day it is all over the fauces; by the 5th or 6th day the temperature is pretty high, 101° to 103°. The local conditions are very bad, the patient takes very little food; at the end of the second week the symptoms are better if death does not take place.

The disease may be of the gangrenous type, when it is very malignant, great prostration ensues, pulse very weak and quick, face shrunken, extremities cold, temperature up to 105°.

Sir W. Jenner gives 3 other forms of diphtheria, *nasal, insidious, true croup*; in the latter the process extending to the trachea and larynx.

As to the sequelæ, the accompanying albuminuria exists in half the cases, in most cases there is a little albumen, exceedingly rare to find protracted albuminuria.

NOTES OF A

Clinical Lecture on Cataract.

BY C. HIGGENS, ESQ., F.R.C.S.

Mr. HIGGENS began his lecture by stating that he had operated on 58 eyes in 49 patients between April 5th, 1875, and Feb. 29th, 1876. The results in 55 of these were more or less successful, whilst three were failures. In ten, only limited improvement took place on account of severe iritis in five, opacity of vitreous in two, extensive atrophy of choroid and retina in one, and opacity of cornea in two. In the remaining 45 excellent sight was restored. Of the three cases of failure two were due to suppuration of cornea, the other was a child $3\frac{1}{2}$ months old in which destructive choroido-iritis was set up by too free use of needle in the solution operation. In only one case did prolapse of vitreous take place, this was an extremely unsound eye with shrunken lens and fluid vitreous. None of the other accidents occurred.

Besides the above 58 cases there were five of lamellar cataract in each of which a small iridectomy was done with success.

Cataract is an opacity of the crystalline lens, the causes are somewhat obscure but it probably depends in most cases on an impairment of nutrition consequent on senile decay or general constitutional condition, *e.g.*, diabetes. It also occurs in connection with inflammatory changes in the choroid, ciliary body, iris or vitreous, is met with as a congenital defect, and not unfrequently results from injury.

There are two principal forms of cataract. Soft or cortical, hard or nuclear. In the former the cortical substance of the lens is primarily affected, and the central subsequently; the whole being soft or fluid. In the latter the central first becomes hard, amber coloured, and opaque, and then the cortical, but this always remains softer than the nucleus. Cortical cataract is essentially a disease of early life, while nuclear occurs, with few exceptions, in persons past middle life, hence the former is called juvenile and the latter senile. Traumatic cataract is, however, always soft, but more so in the young than the old. In the 58 cases 14 were cortical, seven idiopathic, and seven traumatic; the remaining 44 were nuclear. Lamellar cataract is a circular disc shaped opacity of cortical part of lens situated centrally from its periphery, but nearer to its anterior than its posterior surface. This is always congenital and as a rule remains stationary. It is best treated by an artificial pupil over a clear portion of the lens.

In the diagnosis care must be taken not to take simple naked eye appearances as evidence, the lens in old people especially, often looks blueish and opaque, this associated with failure of vision has often been diagnosed as cataract when it was really glaucoma; and thus patients have been allowed to go blind when by proper treatment sight might have been saved. Oblique illumination and a glance with the ophthalmoscope will certainly show if the lens is opaque or not. If it is wholly opaque the pupil is filled with a blueish white or amber yellow mass, if only parts are affected oblique illumination shows greyish streaks or spots on a dark ground, and with the ophthalmoscope dark patches on a bright red ground are seen. The examination is always facilitated by previously dilating the pupil with atropina.

The treatment is entirely operative. In any case there are only two points to settle,—first, is it suitable for operation? second (except in the lamellar variety), how shall the lens be removed.

It is first necessary to ascertain if the eye has good perception of light, if the shadow of the hand can be seen, and next the state of the cataract itself. If one eye only be affected we must wait until the lens is entirely opaque; but if both are so and the patient have no useful vision we must operate whether either be ripe or not. Only one however, must be done at a time, and that one in which the cataract is most mature.

There are some other details which however are less important to observe, thus gouty persons with bad arteries or those prematurely old with very white hair, or advanced diabetics or those enfeebled from any other cause are not favourable subjects. Age counted by years is no bar.

Cataract may be removed by solution or by extraction. As a broad rule, solution is applicable to soft or juvenile cataracts, whilst hard or senile cataracts should be extracted. The object of the solution operation is

to open the capsule and allow the lens to be acted on by the aqueous, so that it is softened and finally absorbed. The pupil is dilated with atropine and a needle passed obliquely through the cornea is made to lacerate the capsule gently, the pupil being kept well dilated afterwards. This will probably have to be repeated before it is altogether absorbed. Too much must not be done at one sitting as the lens may swell too rapidly and cause iritis, increased tension, &c.; if this should arise iridectomy must be done to make room for the swelling lens or else the lens extracted.

Mr. Higgens objects to needle operations, for the treatment takes a very long time and there is often much trouble from opaque capsule afterwards, so that when he employs it, it is only on very young children. He much prefers the operation of linear extraction, by this is meant the removal of the lens through a section made in the same direction as a straight line drawn from the centre of curvature of the cornea to its circumference, one of its radii, the section is therefore perpendicular to its surface. The incision is made with a long thin knife across the extreme upper part of the cornea and a small piece of iris removed, of same breadth as pupil; the capsule is then lacerated and the soft lens matter removed by gently stroking the cornea. Only the one eye need be bound up.

Mr. Higgens then made some remarks on the various modifications of extraction for hard or senile cataracts; as only three had been used by him he should not describe any others. The first was linear extraction upwards, but a much larger section of cornea must be made than in the operation for soft cataract. After this a small piece of iris is removed, the capsule lacerated, and the lens gently pressed out. This may be done downwards if preferred. Including the seven cases of cortical 35 of the 58 were done in this manner. The second method was by a small flap comprising about one third of the cornea, the knife being kept parallel to the iris. This may be made either upwards or downwards. Eight cases were operated on thus, but all upwards. The third method was by oblique corneal section, this also can be done upwards or downwards; the latter way being very simple. Only a cataract knife, sharp hook, and curette are needed, and no anæsthetic. The knife is passed through exactly in the horizontal corneal meridian with the cutting edge in the direction in which we mean to cut out, otherwise the aqueous will escape and iris be wounded. The incision when finished should pass obliquely through cornea, terminating about midway between its summit and lower margin. The removal of the cataract is similar in all, but an iridectomy need not be done in the third method. Eight eyes were operated on by oblique corneal section.

In what cases should iridectomy be done? and should the section be made upwards or downwards? Iridectomy should be done where from previous iritis synechiæ have formed, and in all cases where pupil does not dilate well, even although there are no adhesions. In cases of increased tension, and also when the lens is only partially opaque, it may be done some weeks previously to the extraction or at the same time.

The advantages of iridectomy are,—first, that it gives room for the escape of the cataract; second, it prevents prolapse of iris afterwards; and third, it diminishes the risk of closure of pupil by subsequent iritis, and if done before, lessens the risk of iritis. Mr. Higgens almost always employs iridectomy, and considers that as a rule extraction without it is not a good operation. He also strongly recommends the downward section, for it can be done with greater facility and complications are less likely to arise; and, except in the case of young people, the disfigurement is not important.

The accidents which may happen are,—first, premature escape of aqueous, this may arise if care be not taken and the iris may fold over the edge of the knife; in this case it is better to complete the section with scissors as otherwise the pupil will be irregular; second, bleeding into the anterior chamber, if the blood does not escape on gentle pressure leave alone until it is absorbed, but if the capsule is opened the lens must be removed; third, prolapse of vitreous; fourth, displacement of cataract. In either of these cases no pressure must be made but the lens removed by scoop or sharp hook.

After treatment: place two folds of wet lint upon each eye and secure them with the bandage Mr. Dunnage devised for the purpose, and keep them continually wet with water. On the fourth day the patient may get up out of bed. The eye should not be opened for a week; but if the lids look natural, all is going on well. At the end of that time we may carefully look at the eye and if there be no inflammation the sound eye may be unbandaged but protected by a shade. In three weeks the operated eye may be unbandaged, but the shade kept on till all signs of vascularity have subsided (six weeks or longer). Suitable glasses may then be given; generally about + $2\frac{1}{2}$ for reading, and + 3 for going about.

Such is the usual course of events, but more or less severe pain may come on within the first two or three days with a constant flow of tears and puffiness of the edges of the lids. These symptoms indicate iritis or inversion of the lower lid. The eye need not be opened, but by simply drawing down the lower lid, inversion if present is discovered. If such be the case we must try and keep it in place by a piece of strapping, this failing a portion of skin and orbicularis must be removed. If the lid is not inverted it is pretty sure to be iritis; for this use belladonna lotion instead of water either warm or iced, and also apply two or three leeches to the temple. Again about the second or third day if the lids are considerably swollen with muco-purulent discharge and probably severe pain, this indicates suppuration of cornea. The eye will

most likely be lost. Hot fomentations of belladonna should be used six or eight times a day and the eye bound up with belladonna lotion in the intervals, also quinine, iron, and liberal diet with stimulants, and opium at night must be given.

The conditions requiring secondary operations are chiefly due to iritis, as closure of the pupil, seven cases of this required iridectomy or incision. There were also three cases of obstruction by opaque capsule, and in these it was torn through with needles in each with good result. There is risk however, in doing this unless it is absolutely necessary, as the eye may be lost.

REPORT OF THE EYE WARDS.

During the month of March the following 83 operations have been performed:—Extraction of cataract 10, in 2 of these the lens were dislocated as well as rendered cataractous by the injury, one upwards and theo ther into the anterior chamber; Iridectomy, 37; Sclerotomy, 12; Strabismus 4, convergent 3 and divergent 1; Excisions, 4; Excision of staphyloma 1; Abscission, 1; Needle operation for opaque capsule, 2; Incision for ditto 1; Closure of palpebral aperture, 3; Operation for entropion, 1; Excision of cilia for trichiasis, 1; Tattoeing for corneal opacity, 2; Operation for symblepharon, 1; Transplantation of pterygium (?), 2; Removal of congenital sebaceous cyst, 2.

The anæsthetic "mixture" has been given 62 times and with no serious results.

One of the cases of cataract occurred in a man who had microphthalmos or congenitally small eyes, so that they looked at first sight as if shrunken. In addition there was in each a coloboma or deficiency of the iris at the lower part. He had been blind for 40 years with cataract in the right eye and lately sight has been failing from the same cause in the other. On account of the size of the eye Mr. HIGGENS anticipated difficulty in extraction as he suspected that the lens might be of good size. This indeed proved to be the case, for as the lens was large and very convex it was with much trouble that it could be got out at all through an extensive corneal section. The cataract proved to be of the black variety. It is interesting to note that the patient before the failure of sight in the eyes had excellent sight both for near and distant work. The result has been successful although such was hardly expected.

In the case of symblepharon, also under Mr. HIGGENS, due to cicatrix from burn, the following operation was done. The band of adhesion was first separated from the globe and then a flap of conjunctiva dissected off from below the cornea and secured by means of sutures so as to cover the raw surface left. Besides this the apex of the separated band of adhesion was turned down and the suture fastened to it brought out through the substance of the lower lid on to the cheek and tied there. In this way no two raw surfaces were left in opposition. The flap of conjunctiva took well and the result was consequently successful.

A case of conical cornea has been in attendance, it is not an extreme case but the myopia resulting being very irregular consequently is but little remedied by concave glasses. She was ordered to use stenopaic spectacles which improved direct vision, viz., black discs with a very small central opening in each, and when it increases so that they are no longer useful an operation can be performed.

In our last issue it will be remembered that we reported a case of cysticercus in the orbit. The wound soon healed up and the lids were afterwards separated; the eye remained uninjured and sight has returned, the evidences of optic neuritis having disappeared. There is however ptosis and inability to move the eye upwards on account of the levator palpebræ and superior rectus muscles having been involved.

OBSTETRICS.

February 21st.—The Junior was called at 11·30 p.m. to the following case:—

The woman had had pains for one week previously. These had been bearing down and fairly strong for five or six hours; had had a show early in the day. The os would barely admit the finger, gripping it tightly. The patient was of the full size of pregnancy, and said she had gone her full time. Two hours after the os was somewhat more dilated, and a vertex and hand could be made out; there was much liquor amnii. The Senior was then sent for. At that time the pulse was very feeble and 120; the tongue dry, the woman exhausted and complaining much. The os very firm and rigid, and to this and the excess of liquor amnii much of the difficulty was attributed. Barnes' bags were used and dilated the os somewhat, and then the membranes were ruptured; much fluid escaped, and then a head could be made out posteriorly, but the os was immediately filled up by another bag. The woman's condition mended, her pulse became less frequent, and as the second bag was engaging the os nicely it was decided at 5 a.m. to leave her to see if this would do its work. By the morning, however, it had failed to do this, and now a foot was presenting. By Dr. Galabin's directions chloroform was administered, this, however, acted upon the os but slightly. The presentation changed, but the Senior seized a foot and brought it down; ergot was given and the child expelled.

The second presentation was a hand and head. The indication being for a speedy delivery, the child was turned with some difficulty, on account of the firm contraction of uterus from ergot. After this everything went well and the woman made a good recovery. Both

children were about the fourth or fifth month, well developed with perfect nails

March 12th.—The Charity were called at 3 a.m. by an extern to a case of prolapse of funis. The vertex was found presenting and with it a large mass of cord, which it was not possible to return; it was not pulsating, and had been down certainly more than half an hour, but probably some hours. The woman was exhausted with a pulse of 108, and a furred tongue, and had been in labor more than 12 hours. A narrow urgugate diameter was made out, apparently very little over three inches. After waiting a couple of hours, as the condition of things did not alter, the Senior went for Dr. Galabin, and finding him away, proceeded to deliver by forceps. After half an hour's traction no impression was made. The child being dead, the skull was then perforated, without a previous attempt at version, and the contents evacuated; a good part of the cranium was removed by the craniotomy forceps, and then the child easily extracted by the crotchet. The woman has made a good recovery.

STATISTICAL REPORT FOR FEBRUARY.

Number of women attended, 191; single births, 190; dual, 1.
Number of children born, 192; males alive, 92; males dead, 5; females alive, 92; females dead, 3.
Presentations: vertex, 182; footling, 1; breech, 1; hand with vertex, foot and hand.
Operations: forceps, 2; version, 1.

Women in 1st confinement,	27	Women in 2nd confinement,		24	
„ 3rd „	29	„ 4th „		26	
„ 5th „	20	„ 6th „		13	
„ 7th „	22	„ 8th „		5	
„ 9th „	8	„ 10th „		13	
„ 11th „	4	„ 12th „		1	
„ 13th „	2	„ 15th „		2	
„ 16th „	1				

One maternal death from septicæmia following placenta prævia.

R. E. CARRINGTON
Junior for February.

ROYAL COLLEGE OF PHYSICIANS, LONDON.

MATERIA MEDICA AND CHEMISTRY
IN ITS APPLICATIONS TO
PATHOLOGY, PHARMACY AND TOXICOLOGY.

1.—Enumerate the chief Mineral and Vegetable Astringents. How do they act as such? State the cases for which certain of them are more appropriate than others.

2.—In giving Morphia by the Hypodermic method, what dose would you begin with? What effects occasionally follow this mode of introducing the drug, and how may you prevent or ameliorate them?

3.—M ention the preparations and uses of Mustard. What are the active constituents of the seed, and under what conditions is the *Essential* Oil developed?

4.—How can you prove, beyond all doubt, that Chlorine is a constituent of Common Salt? In every ounce of Salt how much Chlorine is there?

5.—A white powder may be Plaster of Paris, Flour, or Arsenious Acid, how would you at once determine which it was? Give in detail the chemical properties of Arsenious Acid, and the tests to be applied when it is in solution and when in the solid form. What antidotes are there for Arsenious Acid, and how do they act?

6.—Describe the preparation and properties of the following substances and state their composition:—Nitrate of Silver, Caustic Potash, Nitric Acid and Ether.

MEDICINE.

1.—Describe fully the courses, relations and distributions of the Right and Left Recurrent Laryngeal Nerves.

2.—What are the causes of Obstruction of the Bowels? How would you distinguish one form of Obstruction from another, and how would you treat the disease?

3.—Describe the condition of lung in Vesicular Emphysema. State the causes, and give the general and physical signs of the disease and its treatment.

4.—Give the causes, morbid appearances, symptoms and treatment of Lardaceous (Amyloid) disease of the Kidneys. How could you distinguish it from the other forms of Bright's disease.

5.—Give a Clinical history of a case of Spinal Meningitis. What would be your treatment of that disease?

6.—What are the effects on health, of the over-crowding of dwelling houses.

MIDWIFERY AND DISEASES OF WOMEN.

1.—A married woman not having menstruated for three months, suffered from a severe attack of flooding, for which she was examined. The Os Uteri felt soft and pulpy and was slightly patulous, though not sufficiently so to admit the point of the finger beyond the Internal Os; the Uterus was reaching midway between pubes and umbilicus (found enlarged). What was the probable condition of the patient? State the reason for your opinion, and what line of treatment would you adopt.

2.—Describe the general and local signs of Arrested Labour, and enumerate the chief causes of Arrest from conditions of the soft parts of the mother (the condition of Ovum, Fœtus and mother's Skeleton which lead to Arrest are not required).

3.—In what cases is the operation of Turning required? What conditions interfere with its accomplishment, and say how you would endeavour to overcome them?

4.—Under what conditions does Phlegmasia Dolens arise in women? Describe its course under the several conditions of its occurrence, and the treatment.

5.—What is the significance of Uterine Hæmorrhage persisting with occasional remissions and intermissions after the child-bearing age? What is the indication? How would you carry it out?

6.—What means do we possess wherewith to dilate the Os and Cervix in the unimpregnated condition? State why you prefer one kind to another, and also tell what untoward symptoms may succeed their use.

ROYAL COLLEGE OF SURGEONS.

PRIMARY EXAMINATION, MARCH 31st, 1876.

1.—Describe in detail one complete revolution of the heart's action.

2.—Trace the changes by which the temporary are replaced by the permanent teeth, and state the period at which each of the permanent teeth generally appears.

3.—State all the points of difference between a dorsal, a cervical and lumbar vertebra respectively. Mention the ligaments by which two dorsal vertebræ are connected.

4.—Give the attachments and relations of the muscles supplied by the anterior tibial nerve.

5.—Describe in order the parts seen on removal of the Dilton muscle.

6.—Describe the Rectum. What are its relations to the other viscera of the Pelvis? How is it supplied with blood-vessels and nerves?

GUY'S HOSPITAL GAZETTE, *APRIL*, 1876.

WE publish this week a letter from an extern correspondent. We cannot say we are disposed entirely to agree with the details of this letter, but with the spirit we certainly do. We think it would be a great advantage were some accommodation provided for the holders of this most laborious of our appointments. The work that a hard-working extern does is simply enormous, and we cannot but think that this is often greatly increased by other men not doing their full share. There are two other points worthy of mention: externs, on account of their numerous calls and necessarily irregular hours, are by no means desirable lodgers, and this renders it at all times not only difficult to obtain apartments but they are per force obliged to choose those they would not otherwise. Finally, the obstetric residents have no rooms of their own at the Hospital, but have to share the common room with the dressers, a fact which militates very strongly against much reading.

WE have often looked with lively satisfaction upon the manner in which the practice of our Hospital is worked almost entirely by students. Reading may give a man knowledge, but no amount of it will give him confidence in applying it, and this is why the appointments at Guy's are so valuable, and why we are noted for turning out so many sound practical men; for at no other institution, we believe, are they so multitudinous or so responsible. What we should like to see would be that this latter quality should be carried even further, that dressers, etc., should use their hands more, and that there should be some fixed rule, rather than the indulgence of the principal to guide us.

THE ladies have again been disappointed. Their victory over the College of Surgeons seems to be but transient, and one that will benefit but few of them; and this we owe to the spirited conduct of the Obstetrical Society, and to Dr. BARNES and his colleagues Drs. FARRE and PRIESTLY at the College. The latter object, upon broad principles, to be the means of sending out *men* and women to practise, having been examined in obstetrics alone, which it requires little argument to show to be inseparable from the primary subject of medicine. A surgeon, when he has finished his operation, forthwith becomes the physician; so it is with midwifery, once the operation over, then we have to be guided by general principles.

This matter of the L.M. degree is not one that concerns the female sex alone, but it is as referable to men as women. We have more than once given our views as to the admission of the sex; we have lately had sufficient demonstration in the operating theatre of their object, but not we believe in Mary Ward.

WE have heartily to return thanks to our contemporary the *Times* and *Gazette* for their good advice. We are at a loss to understand how they have enlightened themselves as to the state of our exchequer. We assure our critic that before we are ruined we will give up the GAZETTE, but that, thanks to our subscribers, the prospect of this seems remote enough.

Physical Society.

At the Meeting held February 5th, Mr. HINTON read a paper on "Some methods of treating Fractures."

After some introductory remarks to the subject generally, Mr. Hinton, read as follows:

"In these days of conservatism and scientific surgery one would expect to find surgical appliances tabulated, their precise value recognized, and the surgeon guided in his choice of them by the exigencies of the case rather than by the traditions of his school. But this certainly is not as the matter stands. On scarcely any subject, except, perhaps, Lister's 'Germ theory,' are prejudices so intense and mischievous as on this of fracture treatment: the wonder is, that, handicapped by them as we are, surgical art advances at all. Still we at 'Guy's' are more liberal, and much of our exceptional success in fractures of the lower extremity is doubtless due to the recent introduction of apparatus which are unused and probably almost unknown at other Metropolitan Hospitals.

The result of such prejudice is to render the kinds of fracture apparatus limited in each school and different in all. The evil of this first becomes manifest later on in practice, when the self-dependent, isolated, provincial surgeon fresh from school and from running in the rut of his predecessors, knows only one plan of treatment, perhaps even that not the best, where he might know half-a-dozen. Of course there are a great many more than one wanted, but one had better have an 'embarrassment of riches' than an embarrassment the other way."

After some remarks on the pathology of fracture-union, Mr. H. said that fracture apparatus might be considered to belong to four methods.

The first method was that of "Position."
The second ... ... "Extension."
The third ... ... "Retention."
The fourth ... ... "Contention."

These methods were often conbined in practice, though in a theoretical discussion they might be separated for convenience.

This method was but little used among the ancients, though it assumes to have been known by Celsus, who was its chief advocate. Its use was revived in the 16th Century by Jean de Vigo, and again in the 18th Century by Pott. The latter surgeon in his "Researches on the forces which oppose themselves to the reduction of fractures," showed the very first influence of position as a method of treatment, the principal being so to place the limb as to relax all the muscles whose contraction could displace the broken bone. And this was Pott's general method of treatment whenever the nature of the injury would allow its adoption.

The weightiest question bearing on this matter was "What position shall the limb be placed in with regard to flexion or extension?" The majority of English and German surgeons were in favour of the partly flexed position, and they defended it vigorously against Dêsault and Boyer, who were for the extended one. Mr. Hinton argued for semi-flexion, on the ground that by its aid "We may remove the only active cause of displacement which *can* exist and yet keep the limb in a position at once natural and comfortable to the patient."

But the angle of the articulation in the position of greatest muscular relaxation was necessarily not constant. For it is the resultant of a balance struck between the aggregate of the extensor and flexor muscles, and will therefore manifestly vary as the relation of these muscular groups towards each other. In most joints the angle of rest is about 45° or ¼ flexed, only in the wrist and forearm are the muscles balanced with ½ flexion and ½ peonation.

The method of extension was then discussed, and the opinions of celebrated surgeons, Malgayne, Nélaton, Pott, were cited to prove that other methods are as efficient in restoring the leg to a good position and its normal length, and not so distressing to the patient. Numerous experiments showed that (apart from the intense discomfort caused by the method) even in the hands of the best surgeons and with all the conditions apparently favourable, the continuous extension of a fractured limb has been now and again followed by incomplete callus-formation or fibrous union.

"Moreover, muscle-tonicity is a natural power of inestimable value, which, if not destroyed by extension but utilized by some milder means, will supply the precise amount of forcible contact between the broken surfaces necessary to excite normal reparative action. And this excitation is self-adjusting in its intensity, for if the individual be strong and healthy the greater tonicity of muscle holding the bone in contact will excite effusion of lymph in greater quantity than a patient of less power would be able to bear, and vice versâ.

The method of retention was then discussed and some new retention apparatus described.

Lastly the "Contention" or "Immovable method" was noticed and the history of its improvements briefly sketched. The advantages of using this species of appliance were two-fold. First, the plastic splint may be moulded accurately to fit any shape however eccentric, and hardening into immobility, restores the support lost by the breaking of the bone. Second, it exerts an equally balanced, centripetal pressure on the limb which tends to soothe the irritated muscles, and is nearly always effective in preventing their spasmodic action, its retentive power on the fragments is, therefore, doubled. Any nicely graduated pressure on a limb has been shown to possess an important antiphlogistic power. It mitigates pain and consequent congestion and gives to all the tissues rest; it presses the walls of the atonic vessels gently together, and thus by assisting the re-absorption of the exudations, it lessens the inflammation and œdema, and hastens the formation and consolidation of callus.

At the Meeting held Feb. 19th, Mr. Bull read a paper on "Hay Fever."

Mr. Bull began by stating that the subject of his paper was peculiarly interesting to him as he was himself a sufferer from the complaint. Very little literature existed on the subject, which made the composition of a paper difficult.

After giving the various opinions of all the authors who have written on hay fever concerning the causes of the complaint, Mr. Bull proceeded to give a graphic description of an attack. There were two forms of hay fever, the Catarrhal and Asthmatical, and one form may occur without the other.

The following conditions were supposed to have caused attacks of the complaint:—Solar heat and light, dust, emanations from flowering plants, benzoic acid, coumarin, ozone, and finally pollen. Mr. Blackley had made experiments with all these supposed causes, and had found that none of them had any effect in producing hay fever except the pollen.

The behaviour of the pollen grain when under similar conditions to those under which it would be in the lung was then noticed.

The pollen grain has two coats, an inner and an outer; the outer has pores through which when moist the inner one protrudes, forming pouches, and finally bursts and the granular contents of the pollen grain are discharged, and probably act as an irritant.

Mr. Wilson says that the pollen tube formed by the inner coat pushes its way through the cellular interspaces of the pistil into the ovary, where the fovilla acts on the ovary and seed is produced, and in like manner the pollen tube may thrust its way into the underlying cellular planes of the mucus membrane of the lungs.

Any kind of pollen will produce hay fever, but that of the order Graminaceæ, which includes the rye, wheat and oat tribe, seems to be the most virulent in its effects.

If pollen produces hay fever, then it would be expected that the symptoms would correspond in severity with the amount of pollen floating in the atmosphere, and Mr. Blackley found this to be the case in a number of experiments made by him to ascertain this point.

The number of pollen grains is not always so great on the surface of the earth as at a slightly higher altitude, and clouds of pollen may be conveyed in the higher atmosphere for great distances.

The conditions causing increased severity of the attacks are hot moist weather, exercise in the open air, the smell of hay or flowers, &c., with confinement to the house.

A very hot season without rain, a heavy shower of rain, residence at the sea or in the midst of a large town mitigate them. People of a nervous temperament are predisposed to the complaint. There must exist some peculiar idiosyncrasy to the action of pollen in hay fever patients, much in the same way that others are affected by the smell of ipecacuanha.

With regard to treatment, Mr. Bull stated that it was in a most unsatisfactory state, no drug having yet been discovered which has any real power over the disease. After some facetious remarks on homœopathy, he said that removal from the exciting cause was certainly the most rational form of treatment, and therefore patients should go where there was no grass.

The asthmatic attacks in hay fever were supposed to be due either to œdema of the submuous tissue of the lungs, or to contraction of the muscular fibres around the bronchial tubes. If the asthma were due to contraction of the muscular fibres, then Nitrite of Amyl might do good. Paper dipped in Nitre and burnt in the room seemed undoubtedly to relieve the asthmatical symptoms.

Quinine had been much lauded both as an injection up the

nostrils and taken internally, and the evidence in its favour is sufficiently strong to make it worth a trial in future cases.

At the Meeting held March 4th, Mr. PEDLEY read a paper on "Notes on Dental Surgery."

After briefly speaking of the minute anatomy of the teeth, Mr. Pedley mentioned the conditions arising from disease of these organs with which the general practitioner is likely to meet and with the treatment of which he should be conversant.

He described the process of caries and thought that in those situations where access to a dentist was impossible the surgeon should be able to stop a tooth. If better material was not at hand a durable filling may be made by amalgamating mercury with the filings of a shilling.

A pellet of cotton wool moistened with a preparation of resin dissolved in carbolic acid placed in the cavity of a carious tooth is an effectual means of arresting toothache. He described the formation and treatment of alveolar abscess, and mentioned two cases in which death had taken place from this cause, one of which occurred in this hospital and is to be found in the P. M. reports of Sept., 1874.

Fistulous openings on the face may occur from disease of any tooth in the mouth, and it is important to diagnose between this and necrosis of the jaw; in the latter there is generally much more thickening and infiltration of lymph, the openings are usually multiple and straggling and not one short one as in alveolar abscess, also in alveolar abscess the pus is devoid of the smell characteristic of that from necrosed bone. When the mischief arises from a tooth there can generally be felt a ridge formed by the walls of the fistula running from the cheek to the faulty organ, it is impossible on merely feeling with a probe to distinguish necrosed tooth from necrosed bone.

He thought that lancing the gums in children was now too often neglected.

Attention was called to the important nervous connections of the teeth, their disease being the most common cause of neuralgia about the face and head, often of earache. Trismus rarely arises from any other cause. Many severe nervous affections have been traced to dental irritation.

He spoke of some irregularities of the teeth in children which could be rectified by simple means and also of difficult eruption of the wisdom teeth.

After a few hints on the operation of extraction he closed by urging the importance of advising patients to adopt preservative measures on the appearance of signs of decay, also of prescribing artificial teeth for those who were without natural organs, for the stomach could not properly do its work if the food it received was not masticated, and nothing could supersede this process.

At the Meeting held March 18th, Mr. G. MACKERN read a paper on "Specific Remedies."

After describing some curious specifics of the middle ages when even Parliament voted large sums for supposed cures, it was next shown that almost everybody entering the Medical Profession starts with a firm belief in the power of medicines, and that at the end of his hospital career the student is often driven into the broad and easy road of scepticism by the babel of therapeutic discord which is seen in every book, and heard around every bed. There are two methods of investigating the action of drugs:

1.—The method of clinical experience, the old and tried method which in 2,000 years it must be admitted has yielded us very little beyond the primary facts that Quinine will arrest an intermittent, that Salts will purge, and that Opium will allay pain and lull to sleep.

2.—The method of experimenting on animals so as to discover the exact physiological effects of drugs. This method it was said, yielded the best results, for in the knowledge of the physiological action of remedies can alone be based a rational system of therapeutics.

But supposing the exact physiological effects were known, it was still very difficult to deduct from this the therapeutic effects (or its use in disease) of the remedy, for this a more thorough knowledge of functional pathology is necessary; yet Dr. Brunton, a few years ago made this deduction most successfully in the case of Nitrite of Amyl, so that to-day we have a most sure remedy for angina pectoris.

The physiological actions of the following drugs were then detailed:

I.—Medicines that directly increase oxidation. Iron, Potash, Chlorine, Bromine and Iodine, Salts of Zinc, Antimony and Copper, Mercury. Iron was called a specific in certain forms of anæmia; Iodide of Potassium for its power of dissolving away gummata, &c., and Mercury in syphilis, though its mode of action is unknown.

II.—Medicines that diminish oxidation, Quinine, Salicylic Acid, Phosphorus, Alcohol, Acids (mineral and vegetable.)

Quinine was called a specific in ague and its mode of action explained by its effect on the reflex inhibitory centres in the brain, Salicylic Acid was described as one of the best antipyretics we have, Phosphorus is a powerful deoxidiser but its therapeutic use is not yet determined.

III.—Remedies influencing fermentation. Carbolic Acid, Sulphate of Quinine, Corrosive Sublimate; of these Carbolic Acid is the most sure in destroying low organisms: hence the antiseptic treatment of wounds by Carbolic Acid is rational.

IV.—Drugs acting on the heart. Attention was first drawn to the wonderful selective power of some drugs in atttacking certain nerves or even portions of nerves; resembling in this way morbid processes in the body.

After the conclusion of the discussion, the report of the Presidents was read by Dr. TAYLOR, and the names of the prizemen announced as follows:—first prize, of £10, Mr. HINTON, for his paper on "Some methods of treating fractures;" second prize, £5, Mr. BRETT, for his paper on "Expression as an index to disease;" prize for speaking, £5, Mr. LANE. The following new Presidents were elected:—Messrs. Brett, Gathergood, Hinton, Lane, Lee, Lubbock, Mackern, Reynolds.

A vote of thanks to the prizemen was then proposed by Mr. SYMONDS, to which they replied.

Mr. A. H. JONES proposed a vote of thanks to the Treasurer for the kind interest manifested by him in the Society, and was seconded by Mr. LANCASTER. After the Treasurer had replied, Mr. R. E. CARRINGTON proposed, and Mr. J. MORGAN seconded, a vote of thanks to the Hon. Secretaries for their conduct of business during the year. Dr. TAYLOR and Mr. LUCAS replied, the former laying especial stress upon the fact that there were no competitors for the essay prize. The last vote was one of thanks to Mr. ED. COCK, to which he replied in the genial manner with which the frequenters of the physical meetings are familiar.

NOTES OF 51 CASES OF AORTIC ANEURISM.

ABDOMINAL ANEURISM.

Males 11; Females 2.—13.

SYMPTOMS.

Tumour in 5; Pulsation in 8; Bruit in 6; Pain in 10; Vomiting in 5; Dysphagia in 1; Hæmoptysis in 1; Paraplegia in 1.

ANATOMICAL CHANGES.

Eroding Vertebræ, 4; Pressing forward Duodenum or Pancreas, 2; Bursting into or behind Peritoneum, 6; Pressin

Œsophagus, 2; Extravasating into Lung after becoming diffuse in Posterior Mediastinum, 1; Rupture into Pleura, 1.

A fourteenth Aneurism occurred in a case to be recorded with Thoracic Aneurisms. The five who had tumour had also other symptoms, which together, rendered the diagnosis certain during life—thus, pulsation existed in tumour, though it is not recorded in all that it was expansile; a bruit occurred in 4 of them and pain in 3.

THORACIC ANEURISM.

Males 34; Females 4.—38.

Class I.—In which there could be no doubt as to the nature of the disease. (Four Cases).

SYMPTOMS.

Pulsation in 4; Tumour in 4; Bruit in 3; Pain in 3; Dyspnœa in 1; Hæmoptysis, none; Syncope in 1; Dysphagia in 1.

ANATOMICAL CHANGES.

Coming forward in 4; Pressing on Trachœa (not direct in any); Pressing on Heart in 1; Opening into Pleura in 1; Opening into Pericardium 1.

Class II.—In which Aneurism was capable of diagnosis by induction. (Thirteen Cases).

SYMPTOMS.

Dyspnœa in 12; Hæmoptysis in 7; Expectoration of frothy glairy mucus in 2; Voice altered in 4; Dysphagia in 5; Pain in 3.

ANATOMICAL CHANGES.

Pressing on Trachœa or Bronchi in 8; Ulcerating into Air Passages in 3; Compressing portion of Lung in 5; Pressing on Œsophagus in 2; Opening into Pleura in 2; Opening into Pericardium in 1; Opening into Pulmonary Artery in 1; Eroding Vertebræ in 3.

Class III.—In which symptoms were insufficient for diagnosis. (Sixteen Cases).

SYMPTOMS.

Dyspnœa in 10; Hæmoptysis in 5; Expectoration of glairy sputa in 1; Cyanosis in 2; Bruit in 3; Voice altered in 1; Vomiting in 1; Dysphagia in 1; Pain in 3; Paraplegia in 1.

ANATOMICAL CHANGES.

Pressing on air passages in 6; Ulcerating into air passages in 6; Pressing on Œsophagus in 2; Pressing on Pulmonary Artery in 1; Opening into Pulmonary Artery in 1; Rupturing into Œsophagus in 1; Rupturing into Pleura in 4; Rupturing into Pericardium in 1; Eroding Vertebræ in 5; Flattening Spinal Cord in 1.

The Œsophagus was pressed upon and ulcerated into in the same case, but there were two separate cases; were the Pulmonary Artery was opened into and pressed upon.

Class IV.—In which the signs of Aneurism were merged in that of another complaint. (Two Cases).

1.—General Dropsy, Morbus Cordis and Granular Kidneys, rupture of a small Aneurism of *Sinus Valsalvæ* into Pulmonary Artery.

2.—No symptoms of Aneurism. Embolic Gangrene of lower extremity. Thoracic Aneurism Eroding Vertebræ.

Class V.—Brought in dead. (three Cases.)

SYMPTOMS.

Sudden from Hæmoptysis, 1; Sudden without Hæmoptysis, 2.

ANATOMICAL CHANGES.

Ruptured into Lung in 1; Ruptured into Pericardium in 1; Ruptured into Pleura in 1.

These statistics were taken from the whole of the cases occurring in the Post-Mortem records of this Hospital for the seven years, 1868-74. The clinical features have been extracted from the same source, and this may be a cause of fallacy to a certain extent, because of the numerous transcriptions which this method subjects the facts to. But as we are dealing with such large numbers, some amount of error may be allowed without endangering the validity of the whole. There are several points which have not been brought out; such as pressure on the Pneumogastric or Recurrent Nerves: affection of one pupil; variation of the pulses at the wrists, the occurrence of syphilis in organs, &c. But to have done this much is somewhat satisfactory, and ought to show how much may be done in the way of classifying facts which must otherwise lie useless in unstratified heaps.

In looking at the abdominal cases, it will at once be seen how frequent a symptom pain was, as the Vertebræ were Eroded in only four cases out of ten, there must have been another common origin of pain. Might the stretching of the filaments of the sympathetic plexus about the Cæliac Artery be a cause? Vomiting was another not infrequent symptom.

Among the Thoracic Cases Hæmoptysis occurred thirteen times and caused death in four.

The Aneurism ruptured into the Pleura in nine cases; into the Peritoneum in six; into the Pericardium in four—this includes the abdominal cases.

Among the Aortic Cases Dyspnœa occurred in twenty-three, though direct pressure on the air passages seems to have occurred in fourteen only.

Dysphagia occurred in 8 cases out of the whole fifty-one, yet the Œsophagus was compressed in four only. The Vertebræ were eroded in ten Thoracic Cases. Pain existed in nine.

J. M. HOBSON.

The Surgery.

During the months of January and February the following fractures and dislocations were treated in the Surgery:—

FRACTURES.

Nasal Bone	1	Humerus, Internal Cond	1
Jaw	2	Olecranon	4
Sternum	1	Ulna	2
Ribs	48	Radius, Colles'	6
Clavicle	13	„ other varieties...	9
Coracoid Process	1	Ulna and Radius	4
Acromion „	1	Meta-Carpal Bones ...	8
Humerus, Neck	4	Femur (in young childn.)	2
„ Shaft	3	External Malleolus ...	2

Of the two cases of fractured Jaw, one was very severe being broken in two places, viz., near the symphysis and at the second molar tooth. This case was afterwards admitted into 23 Accident. The other was fractured to the right of the symphysis. The wire splint of Hamilton was adjusted in each case.

The Sternum was fractured by direct injury inflicted by the pole of a waggon and there was no displacement. It was situated near the upper portion of the gladiolus. The chest was strapped.

Several of the fractures of the Clavicle occurred in old people, resulting from direct violence, and were comminuted and near the acromial end. In these cases bandages were applied between the shoulders.

Two instances of fracture of the Humerus in two places occurred, in both of which there was considerable displacement and difficulty to restore the position. In one an anterior angular splint was applied, with the double advantage of supplying means to apply extension and also to keep the elbow at rest, one fracture being near the joint.

One of the fractured Olecranons was put up in a semi-flexed position, on account of the very slight displacement. A straight splint was used in the other cases with advantage,

and was finally rendered necessary in the first-mentioned, because the fragments became more separated.

In only one of the fractures of the RADIUS, known as Colles', was there very decided evidence of impaction of the fragments.

The FEMORA fractured were in very young children, and the External Malleoli, one in a child, the other in an adult who refused to be admitted. Both did well with a straight outside splint projecting below the foot.

The DISLOCATIONS treated were as follows:—

Head of Humerus, Sub-Glenoid	5
Ditto Sub-Coracoid	6
Ditto variety not stated	1
Finger	3
Sternal end of Clavicle	1
Jaw	2
Hand, backwards	1

One of the SUB-GLENOID dislocations, which had occurred a week before treatment, became sub-coracoid on the first attempts to reduce it, but became finally replaced after the administration of chloroform.

In another case an old dislocation of the sternal end of the clavicle introduced a difficulty in deciding whether the head of the humerus was restored to its normal position.

One of the dislocated JAWS was so slightly out of place as hardly to reckon as an example of this lesion.

Surgical Cases.

COMPOUND COMMINUTED FRACTURE OF LEFT TIBIA AND FIBULA—SYMPTOMS OF PYÆMIA—AMPUTATION THROUGH KNEE-JOINT—RECOVERY.

J. G., æt. 44, was admitted into Accident Ward, under Mr. BRYANT, December 8th, half an hour after having been kicked by a horse, which also fell on him, breaking his leg.

On admission, there was a small punctured wound (which was bleeding freely), about two inches above the internal malleolus of left leg, both the tibia and fibula being fractured and comminuted. Wound was sealed with Tr. Benz. Co., and limb put up in back and two side splints. For the first ten days the man did well, and the chance of saving the limb appeared most hopeful. As soon however, as repair commenced, suppuration took place in the wound, and the patient began to go down hill.

On January 7th Mr. BRYANT enlarged the wound and removed some small fragments of necrosed bone. Slight relief followed, but with no ultimate benefit, for the whole leg began to inflame; and on the 12th and 15th respectively, it was found necessary to make incisions over the tibia to relieve tension and to allow of the escape of pus.

On the morning of January 25th, the patient had a rigor, followed by profuse perspirations, and accompanied by a sudden increase of temperature from 99·8° to 106·4°. Discharge from the wounds suddenly ceased; no retained secretion was discoverable. The leg looked dusky red; there was anorexia, great thirst, furred but moist tongue, with an irritable pulse of 130. He was ordered Quiniæ Sulph. gr. iij. ex Mist. Quiniæ ℥ j. 6tis horis. The day following, viz., January 26th, there was some temporary improvement; the temperature had come down to 102°, the pulse was less irritable, and there had been no return of rigors. The leg, however, was no better, so Mr. BRYANT deemed it advisable to seize the opportune slight improvement in the patient's condition, and accordingly the limb was amputated; but not wishing to risk the danger that might arise were the amputation made through the continuity of the bones implicated, he removed the limb at the knee-joint. Antero-posterior flaps were made, the patella being left in situ and disturbed as little as possible. The bleeding, which was unusually small, was readily restrained by torsion. Flaps were brought together by silk sutures, a drainage tube inserted and stump put on a back splint.

The patient at once commenced to mend. The drainage tube was taken out on January 29th, and the leg dressed for the first time.

On February 2nd the temperature was normal, and with the exception of sloughing of a small portion of the anterior flap on the outer side, patient has made an uninterrupted recovery.

Remarks.—This case shows well (1) the importance of choosing an opportune time for secondary amputation; (2) the fact that cartilage may be exposed without detriment; (3) the value of simplicity in dressing. With regard to the first point, the issue of the case leaves no doubt of the propriety of seizing the right moment for secondary amputation. The operation was done in the nick of time, there being an amendment in the man's condition, though none as far as his leg was concerned. Can anything be more satisfactory than the report that "the patient at once commenced to mend."

The second important fact has been denied by many surgeons who hold the opinion that exposed cartilage must necrose. In the present case the cartilage was exposed for 5 weeks without the slightest injury. Though exposed, it was never touched, beyond irrigation with Condy's fluid. The value of simplicity in dressing is shown conclusively by the result. The stump was daily irrigated (not syringed) with Condy's fluid, and dressed with simple dry lint; between the two layers, which were folded over the stump, a piece of lint soaked in terebene and oil (1 in 3) with simple cotton wool was placed.

Football.

GUY'S *v.* BLACKHEATH.

This match was played at Blackheath, on March 11th. An excellent game took place, and at call of no-side, Blackheath had obtained two goals against two touch-downs. Guy's played two short the whole game; but, nevertheless, the forwards played well together, thus giving us the advantage in the scrimmages. For the Hospital, Finch, Pinching and Howell played well.

GUY'S *v.* MARLBOROUGH NOMADS.

Played at Blackheath, on the 18th inst., when, for the first time for two months, we were able to muster a full team. Our forwards again played excellently, Pinching in particular, being most energetic in the scrimmages. For the first half-time no advantage, beyond a few touch-downs, was obtained. Shortly after half-time Gray obtained a try, which he converted into a goal. This was quickly followed by a try gained by Maclean after a brilliant run, which was also turned into good account by Gray. We were thus victorious by 2 goals and several touch-downs to nothing. Besides those mentioned the following were most conspicuous:—Gilbert, Howell, and Welchman.

This was the last match of a not very successful season.

GUY'S HOSPITAL LIBRARY

Conversation.

I believe that all minds have pretty much the same kinds of activities at one or other time of their existence, and vary only in this, that different persons severally enjoy and encourage not quite the same impulses; or, to regard, if you like, the affair as more passive, they differ in this, that varying activities naturally preponderate in different persons, though the whole round of human activity is more or less present in all. No doubt the plan of different people's minds is very much one and the same plan, so that their minds correspond after the fashion of the correspondence you may see in a lot of dew-beaded spider-webs on a hedgerow, when you are out fresh and early any autumn morning. If you look at the webs you will observe how very like and yet different each is from the other webs; differences in size, so that there are great spider-webs and little spider-webs, just like great minds and little minds; and differences of accidental attachment to this or that twig, just as great minds stick to a great lot of little things, and little minds to a smaller lot of little things; some smaller, some greater, all corresponding. The old spider, somewhere in the middle of each, keeping a sharp look-out to come running down when there seems a chance of getting hold of anything; and something not unlike the old spider is waiting in each mind, great and small, as you may know if you get any of your estate entangled in the meshes of one. "Will you walk into my garden said the spider to the fly? 'Tis the prettiest," &c., &c.

If we could see the whole fabric of each others minds, how well we should be able to compare ourselves with each other, and find those nearest our own sort,—so as to avoid them perhaps—and what a saving there would be of the odium of making, and the annoyance of suffering, false impressions, and then unlearning our nicest lessons. As the matter stands, however, it is often rather through carelessness that such false impressions are made or received; for we instinctively perceive what it is that another person takes real pleasure in. We don't want to be told. Often the other could not tell us if we needed to know. Other people may best know when you are really pleased. The most artificial only requires to be seen oftener by a good observer. His true pleasure will reveal itself to those who observe him; so that although his chief delight seems to consist in keeping you supplied with gratuitous good advice, you may see that that is nothing to how he enjoys himself at something else.

Now, if all minds are so alike in plan, why are some very pleasant to be near, and others, to say the least of it, not very pleasant? The dislike people's bodies have excited is moonshine to the repulsion folks have shown, and do show, for other people's minds. Is it at all due to the above mentioned fact that we are made on the same plan? so that each feels himself respond to every activity another exhibits. And there is no kind of activity in one that does not put in play, in some degree, the corresponding activity in minds that witness it; so that, however much you may dislike the thoughts and feelings another person stirs in you, yet the underlying identity of the plan of your common human nature enables him to arouse within you his own sort of activity, just as a tone of music starts into vibration, and produces the same note in, any portion of an object which naturally yields the same sound. And it is this most penetrating contagion of influence which makes minds so much more intensely disliked than bodies can be. Because in no one can all parts of the mind be active at once; and every one, as he lives on, comes to take direct and spontaneous pleasure in some kinds of thought and action more or less exclusively of other kinds. And the kind of thought and action that pleases one does not please another; whilst, meantime, each is obliged to feel the others influence right inside him when he is within range; so that you may stir up inside another person's mind, by what you say and do, the very things he has all his life been hating and trying to repress and mortify. In which case he will naturally wish you further. And even if you are clever enough to raise in him a certain pleasure in the part of his mental nature whose action is not spontaneously pleasant to him; then, when you go away, and his own nature comes towards its usual balance again, the kind of thoughts you have aroused have to sink down again into their usual place, where they are not naturally approved of, and have to atone for the glow you gave them by going under amidst the disgust of the usually dominant parts of his mental nature. Well, next time he sees you, the thoughts in question may remember their setting down and keep away from you.

How countless and various are the possibilities of thought in a well informed mind; yet it can consider but one thought at a time, as the eye can examine but one thing at a time. Hence should come a deep sense of responsibility in addressing the minds of others, because we presume then to engage their consideration contagiously in the limits of our own; and what we thus set them upon may be too trivial if it is a matter of knowledge; or, if it is a matter of feeling, their feelings may be too refined to allow them to enjoy so coarse a sensation, or too coarse to allow them to enjoy so refined a sensation. Thus we may see the foundation of real affinity and antipathy between individuals. It is because all minds are too much on the same plan for one to be indifferent to the influence of another; so that a mind by nature and culture refined and sensitive may be subjected to rude and rough horripilations of its most gentle feelings by the coarse communication of one in whom the corresponding feelings are exaggerated, uncultured, or raw. For sentiments which are deep and sacred in one mind form, as it were, a highly coloured prominent feature on the face of another.

Similar as the plan of structure of our minds may be, yet there is a bias proper to each; a bias which, like the curve in the course of a Scotch bowl, grows more marked as we move on. For our centres of gravity are not in the same part, and we "incline," as we say, in different directions. *Where is your centre of gravity?* That is the question for a would-be friend. In other words, "shall I like and approve the inclination of that part of my nature which this other person throws into preponderance by his presence and by what he says and does?" If not, the less of him the better, except as an object of observation, that is, an acquaintance.

Remember this, especially, ye who would desire to produce goodly results on others by directly addressing to them advice that you think good, especially if your goodness is of the prominent-feature type. For, alas! goodness may be showy even to vulgarity, as it may be noble. It is only *rightness* that is indifferent to station, and equally right in all stations. Remember it, especially, when you are in the society of those in whom not mere goodness, but a certain refinement, is the thing required. For please observe that *a right refinement constitutes the goodness of the better classes.* I say a right refinement, that naturally is averse from the kind of sensational goodyness which loves prominence and recognition, and will allow no concealment of its superiority to the common little enjoyments of its not equally goody neighbours. True goodness is not the sort you pride yourself in and force upon others. True goodness is a thing ascribed to others, rather than felt inside, since the days of the Pharisee and Publican.

How the time, place, matter, and manner of well-meant remarks may cause sensations in the hearer's mind such as won't lead to the wish to have them again; so that the very praiseworthy—in its way—object may be defeated, whilst the speaker is inwardly flattering himself, as usual, with scarcely merited unction, and entirely unconscious that he is only making a nuisance of himself, and that the hearer he would attract to his own kind of mental or spiritual activity, is all the while wishing him in that disembodied state where these sublunary mistakes of the real effect of our activities are no

longer possible. Wishing him in that perfect communication of souls with each other, where mutual fitness and comparable worth may be at once revealed, and each find his own sort and his own proper level, instead of putting himself out of his level in the wrong sort. Ah! when thus all are revealed, what a general falling into levels there will be! The more ordinary ones stages away from the more enriched and perfect; stage above stage, like the receding circles you may see in those 14th century pictures of beatified saints around the throne, in the National Gallery, the greatest ones, Peter and John, nearest, as at court here below; whilst the very distant ones dwindle down to little rings in which you cannot see a nose and eyes, and the last rows are only dots, a diminishment which must be unsatisfactory for those outsiders, and has often seemed to me to need explanation for ones consolation in the prospect. But I can, after much consideration of the subject, only offer the following, and I cannot suggest that it is very comforting to us outsiders; although I believe it is a very true explanation. I believe, then, that each one's appearance in that state will show just how far in development he really got when alive. Stripped, he will be, of all the scraps of matter not his own with which he was able to put in a respectable appearance here below; only his own proper production will be allowed, not his little make-believes of mental or spiritual considerableness. Hence, then, so many baby-forms, and yet smaller, in the condition from cherubs down to rings and dots crowding the outer circles. It would be of no use bringing a good glass to bear upon them. They *are* the dots they look; promiscuous nothing-particulars, which, favoured by what was put into and upon them by their teachers and preachers, did very well once; so that they went through life, and even passed for adults, to such observation as was possible here below, where there are so many dodges taught by mother nature to help us conceal those truly infantine proportions, in which we are caught by adult age without having escaped from childishness. *Inter cetera mala hoc quoque habet stultitia semper incipit vivere.*

Did you ever see a caddis worm? When I was fishing I never could stick a hook into a caddis worm. I never contemplate a caddis worm without a certain feeling of brotherhood. Nature is essentially too satirical in the way she takes off one thing when she designs another. Every one has, by nature, the faculty of picking up bits wherewith to furnish himself according to the grounds he is upon at the time, as the caddis worm dresses herself in scraps of green when she is upon the leaves, and in bits of brown when upon the stones. Don't despise the simile and think it rough. Don't say to me "everything has both its higher and lower parallels; why should our elevated minds take the lower parallels?" I should be tempted to reply "to keep down at our proper level, O, brother worms!" In point of fact, I expect, the mental dress of most of us is rougher by comparison with what is possible and right in this nineteenth century, than the dress of a caddis worm is by comparison with the best satins and velvets at Swan and Edgar's Most minds are like maggots dressed in scraps, and all that is their own is just the glue the scraps are stuck with, and so much is the weakness of even this glue recognized that in common conversation your subject must not be too deeply or seriously followed. "The human mind" won't endure it. In other words, you mustn't shake the scraps much for fear you see the maggot.

PILOCEREUS SENILIS.

Correspondence.

DEAR MR. EDITOR,

Can you imagine that at some future date rooms will be found by the Hospital for those men who are holding one of the most onerous of the student's appointments, namely, *its* externs. Surely such a large Lying-in Charity as that of *Guy's* can well afford to do so, and that for many reasons.

Firstly.—The Junior in Charity would have no difficulty in finding out whether externs are out at cases when required.

Secondly.—They being on the spot would save time, and in so being the Charity would be able to effect more work, as year by yearhist becomes increased.

Thirdly.—They are called up at all hours and in all weathers; would it not be a good plan to have them housed together, and presided over by the Senior and Junior in Charity in some adjacent building to the Hospital?

Fourthly.—If some such inducements were held out, besides saving many men paying for two sets of rooms, it would also ensure a keen competition and a more thorough knowledge of midwifery to those about to apply for the appointment of extern, for which there might be some examination, the result being advantageous to the Charity.

The reason for the above remarks is that the question of the externs being fairly treated, considering the amount of work, is decidedly open to opinion. Yours very truly,

S. S. B.

ON DUTY FOR APRIL.

House-Physicians:—Messrs. J. M. Hobson and H. N. Smith. Junior House-Physician:—Mr. W. J. Tyson. House-Surgeon:—Mr. A. H. Jones. Junior House-Surgeon:—Mr. C. J. Symonds. Senior Resident Obstetric:—Mr. E. Amphlett. Junior Resident Obstetric:—Mr. W. A. Kidd.

RESIDENT DRESSERS.

For the weeks commencing March 29th:—Messrs. Romano and Stevenson (Mr. Bryant). April 5th:—Mr. A. Moxon Turner (Mr. Durham). April 12th:—Mr. B. W. Gathergood (Mr. Howse). April 19th:—Mr. Richardson (Mr. Forster). April 26th:—Mr. F. T. Pedley (Mr. Bryant).

General.

Mr. W. GALLOWAY, Assistant Inspector of Mines in South Wales, has found that a mixture of air and fire-damp, which could not be ignited by a naked lamp, becomes inflammable on introduction of coal-dust. If fine dry dust be mixed with air, a very small per-centage of fire-damp is sufficient to render the mixture dangerous. It appears, therefore, that the clouds of coal-dust raised by a slight colliery explosion may be a source of great danger by conferring inflammability on air which is contaminated with fire-damp, but not otherwise inflammable.

It is interesting to learn from the *Comptes Rendus* of the French Academy, that M. C. Tanret has succeeded in isolating a new alkaloid from the ergot of rye. As several ill-defined bodies from this source have received the name of *ergotine*, it is considered desirable to apply the term *ergotinine* to the newly-discovered principle. It exists in only extremely smale quantity, and is by no means easy to isolate, in consequenco of the facility with which it suffers alteration on exposure to the atmosphere. Like the other vegetable bases, ergotinine exhibits a strongly alkaline reaction. It is soluble in alcohol, chloroform, and ether. With sulphuric acid it gives a characteristic reaction, producing first a yellowish-red, and then a blue-violet tint.

SAVORY & MOORE'S

SPECIAL PREPARATIONS.

GENUINE PANCREATIC EMULSION AND PANCREATINE. Administered in Diseases where Wasting, Loss of the Power of Digestion and Assimilation are prominent symptoms.

BEST FOOD FOR INFANTS. Resembles Mother's Milk more closely than any other kind of Food, perfectly fulfilling its object, that of promoting the GROWTH and HEALTH of the Child.

DATURA TATULA. For the Relief of Asthma and Chronic Bronchitis. Prepared in all forms for Smoking and Inhalation.

TINCTURE OF GELSEMINUM. Prescribed for Neuralgia, Toothache, &c.
V.de DR. SPENCER THOMPSON'S Paper, "On the Rapid Relief of Neuralgic Pain" in *Lancet*, Nov. 6, 1875.

PEPTODYN combines the active principles of the Digestive Secretions and effects the Digestion and Assimilation of the various kinds of Food, the Farinaceous, Fibrinous and Oleaginous.

PEPSINA PORCI } Best Quality. Supplied in small bottles or in bulk.
AND
PEPSINE WINE. } On account of their large manufacture of Pancreatic Preparations, Messrs. SAVORY & MOORE are enabled to offer them (in quantity) at lower rates.

MEDICATED GELATINE DISCS (Patent) For Opthalmic and Hypodermic use.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

CLINICAL THERMOMETERS.

With clear black burnt-in divisions, which cannot be effaced or rubbed out.

THE STANDARD CLINICAL THERMOMETER, by which all others may be tested at any part of their graduations	0 10 6
THE HOSPITAL CLINICAL THERMOMETER, clear, distinct, and correct	0 6 6
THE PATENT CLINICAL THERMOMETER, with Indestructible Index, which cannot be shaken into the bulb	0 15 0
Kew Certificates from the Royal Kew Observatory may be had with any of the above at 1/6 extra.	
THE IMPROVED PATENT PORTABLE SPIROMETER	5 10 0

L. CASELLA, 147, Holborn Bars, London, E.C.

LIBERAL TERMS ALLOWED TO AGENTS AND ON WHOLESALE ORDERS.

TO STUDENTS.—FIRST-CLASS SURGICAL INSTRUMENTS.

The CHEAPEST HOUSE in LONDON is C. BAKER'S, 244 & 245, High Holborn.

Every article is warranted of the best manufacture.

STETHOSCOPES, every variety, from 2s. each.
DISSECTING CASES, in Ivory Handles, from 16s. 6d. the set.
DISSECTING CASES, in Ebony Handles, from 10s. 6d. the set.
POCKET DRESSING CASES, from 15s. 6d.
MIDWIFERY FORCEPS, 10s. 6d.
STOMACH-PUMP with ENEMA combined, 21s.
POCKET MIDWIFERY CASE, 8s. 6d.
OPHTHALMOSCOPES, for the Pocket, from 6s. 6d.
LIEBREICH'S, ditto, 14s. 6d.
LARYNGOSCOPE, complete in Case, from 25s.
TOOTH FORCEPS, Tomes', all kinds, 5s. 6d. each.
Ditto Clendon's, ditto, 4s. each.
FERGUSSON'S SPECULA, all kinds, 3s. each.
SILVER-PLATED CATHETERS, from 1s. 9d.
HYPODERMIC SYRINGES, from 6s. 6d.
URINOMETERS, from 2s. 6d.

The Self-Registering Clinical Thermometer,

In Case, complete, 3 inch, 5 inch, or 6 inch, at 6s. each.

Catalogues free by post.—Second-hand Surgical Instruments of all kinds kept in stock.

STUDENTS' MICROSCOPES, £3 3s.—C. BAKER'S Students' Microscopes have all the latest improvements, with object-glasses which will define the most delicate pathological structure. Complete, in case, £3 3s.
INJECTED and other PATHOLOGICAL OBJECTS, from 1s. 3d. each. MATERIALS and APPARATUS for MOUNTING of every kind.
Catalogues free by post. Observe—244 & 245, HIGH HOLBORN.

MICROSCOPES AND APPARATUS OF EVERY DESCRIPTION.

GLASS SLIPS, COVERING GLASS, CLIPS, LABELS, OBJECT BOXES AND CABINETS, DROPPING TUBES, MOUNTING FLUIDS, &c., &c.

CLINICAL THERMOMETERS 7s. 6d. & 9s.

IN METAL CASES TO PROPEL AS PENCIL, 15s.

STANLEY, Optician,

13, RAILWAY APPROACH,

LONDON BRIDGE, S.E.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine, and Surgery.

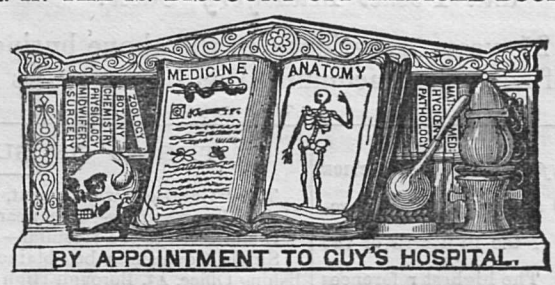
NEW SERIES.—No. 5. MAY, 1876. SIXPENCE.

CONTENTS.

Clinical Lecture on Aneurism	51
Clinical Surgery	52
Royal College of Physicians, London	54
Royal College of Surgeons	55
Pass List	55
The Biennial	55
Statistical Report	55
William Bartlett Hinton	56
New Scholarships	56
Specific Remedies	56
Electrifying Room	58
Dysphagia of Organic Origin	59
The Surgery	59
Clinical Thermometers	60
On Duty for May	60
The Surgical Wards	60
Medical Wards	60
Medical Cases	62
Removal of a Tumour from a Dog	62

3d. IN THE 1s. DISCOUNT OFF MEDICAL BOOKS.

NOTE BOOK FOR EXPERIMENTS IN ANALYTICAL CHEMISTRY, 2s.



NOW READY.

Mr. BRYANT'S NEW SURGERY,

2 VOLS., 19s.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

BOOKS BOUGHT OR TAKEN IN EXCHANGE.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

GENERAL PRACTICE.—A *Bona fide* GENERAL PRACTICE in South London, doing about £1000 a year, will most probably be sold shortly in consequence of the ill-health of the Proprietor. Terms on application. The highest references will be required and given; the latter from Member's of Guy's Staff and others. Address, by letter only, D. R., care of the Publisher of the G. H. Gazette.

TERMS OF SUBSCRIPTION.

The "Gazette" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to ST. CLAIR SHADWELL, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Lecture on Aneurism.

By DR. MOXON, MARCH 18th, 1876.

This is a disease which varies exceedingly in its symptoms, and is nearly certain not to be recognized at first; the patients are generally healthy-looking. This is important to remember. It may be stated as a fact that, compared with any disease which produces the like local symptoms, aneurism leaves the person well-looking; the reason of this is that there is so little of intense pathology about it; it is an accident in the course of a sub-inflammation of arteries, so slow in degree as not to produce any marked symptoms of inflammation. It used to be thought that aneurism depended on degeneration of arteries in old and worn out people; to see the fallacy of this it is only necessary to look at the ages and appearances of two of the three cases now in Clinical, whose ages are respectively 33 and 39, and who are both healthy-looking men.

As to the causes of aneurism there are several given, the influence of which is doubtful (1) Syphilis. Some say this is a frequent cause, but though it co-exists with aneurism very often we cannot look upon it as a cause, on account of the simple fact that women affected with syphilis do not get aneurism. (2) Rheumatism is said by others to be a cause of aneurism; this, however, is very rare if it be a cause. We sometimes find aneurism or the pathological state which leads to it as the result of severe rheumatic heart disease. (3) Drink is also said to cause it. It is of course easy to obtain statistics of the co-existence of aneurism with intemperance, or the consumption of large quantities of beer and spirits; but in a great many of these cases there is another factor to be considered, viz., hard work. (4) Gout is another cause mentioned. There is no doubt that this condition with some other cachexias constitute predisposing causes.

But it is hard bodily work which makes a person get aneurism; the influence of this was seen in the frequency with which some years ago *top-sawyers* (before steam was so much employed in sawing) used to be affected with this disease.

Another class of men in whom the influence of severe bodily exercise is seen are *soldiers*; one of the three cases referred to is that of an old soldier.

Athletes are also very liable to it (another of the cases has been an athlete). There is no doubt of the frequency with which athletism causes aneurism; it may be defined as a sacrifice of health to strength. When in violent exercise the muscles contract strongly, the vessels are temporarily almost occluded, strain is is thus thrown on the heart and great vessels, and the condition necessary for the production of aneurism is present. The cerebral, splenic and coronary arteries are those most affected by strain, which produces a bulging of the wall, and aneurisms are formed. Aneurisms are classified very minutely by some, but many of these divisions are not of much importance.

Fusiform aneurism is comparatively innocent, but if it be near the heart it dilates the valves of the aorta, and thus produces valvular disease.

Saccular (*a*) with complete arterial wall; (*b*) with incomplete arterial wall.—This sub-division is not very important, because the inner wall is soon lined with a wall of fibrin, and this so resembles the original coat that one cannot distinguish one from the other.

Diffused.—When an aneurism bursts this variety is formed:—if it bursts where there are tissues to be compressed it makes itself a sac, but if not death follows immediately upon the bursting,—*e.g.*, into the great serous sacs. It may diffuse into the cellular tissue under the peritoneum, in which case a large solid mass is formed, which does not pulsate.

The leading symptom of aneurism is *pain*. Why is this? It is because in nearly all places nerves run with arteries, and they do so because it is convenient they should. About the aortic arch there are not so many nerves of sensation, and accordingly there is not so much pain; the same is the case in the abdomen. Pain is a much more constant symptom of aneurism in the limbs. Of aneurisms within the body some compress the viscera, others the nerves going to the walls.

Case 1 is that of a house-painter, aged 33, has been an athlete, and says that four or five years ago, after running a race, he had a severe attack of palpitation in the epigastrium. Has drunk freely, and has had syphilis.

In December, 1874, he suffered from great pain in the loins, was treated for irritation of the kidneys; he got better, but was not always free from pain.

In August, 1875, said to have had colic; this may or may not have been so, as he is a painter and colic does cause pain in the back as well as in the abdomen.

On admission, he was found to have a large pulsating swelling in the abdomen, of which he was not conscious himself previous to his admission. This swelling was found to be an aneurism; but it was situated so high up on the abdominal aorta that it was quite out of the question to endeavour to compress the aorta by means of a tourniquet.

Every pulsating tumour in the abdomen is not an aneurism; never say that a pulsating tumour in the abdomen is an aneurism unless pain be present, and especially is this to be observed in women. If an abdominal aneurism is near the large organs it will produce symptoms in those organs as a rule; thus compression of the nerves of the intestine which run close to the large arteries will disturb the intestine and produce great flatulence. The persons affected may die suddenly at any time, especially if they do not submit to the treatment which certainly gives them a chance of being cured, viz., semi-starvation.

Case 2.—A soldier, aged 55, who was always healthy until last July, then a severe attack of bronchitis.

It is very important to known the history of a person who is suffering greatly from bronchitic trouble. Grave bronchitis, pure and simple, is a disease very slow in its progress; it gets worse and worse each winter. But if a person has much bronchitic trouble and has only been ill a very short time and is well nourished, it is probably an aneurism or tumour of the chest.

On admission, this patient was suffering from much dyspnœa, sat up in bed, complained of a sense of tightness in his chest, voice was normal, but he had a brassy ringing cough, which is very characteristic; he brought up a large amount of dark muco-purulent nummular sputa. In aneurism sputa are generally slimy and thin.

In this case it was an open question whether the disease was aneurism or phthisis, but Dr. MOXON inclined to the former.

Clinical Surgery.

NOTES OF A LECTURE ON A CASE OF PAROTID CYST.

BY H. G. HOWSE, M.S.

G. B., æt. 35, was admitted into Naaman on March 13th, 1876, suffering from a large tumour on the right side of the neck.

He gave the following history: the swelling had first been noticed when seven years old. It was not at that time much bigger than a walnut and was situated just below the right angle of the inferior maxilla. It gave him at first no inconvenience and only increased very slowly in size. About four years ago, however, it began to grow rapidly; he associates this with a change of occupation from a comparatively light one to a very laborious one. In 1873 he had it tapped for the first time, when about a pint of thin fluid mixed with some blood came away. In about six months it had refilled to its original size and he had it tapped again, about the same quantity and kind of fluid being discharged. About this time he changed his work to a railway porter, and he states that when carrying heavy parcels, &c., he had to put them always on his left shoulder and to manœuvre his head so as to keep the cyst out of the way. About seven or eight months ago it was tapped for the third time and injected with iodine, but this appeared to do no good, and in the early part of this year he had to give up work on account of the rapidly increasing inconvenience which it had caused him. For the last five or six weeks it has been discharging almost every day more or less greenish fœtid matter from an opening in its lower part.

State on admission.—The tumour was found to vary in size and position from day to day in accordance with the amount discharged from the opening. On March 13th it was five inches long and four broad, extending as high as the lower jaw, as far back as a line with the transverse processes of the vertebræ, and nearly to the middle line in front. On the 14th it had increased in size, being fully seven inches long and five broad; it extended upwards nearly to the ear, and downwards to the subclavian triangle. On the 15th it had discharged about half a pint of fluid during the night and the size had consequently somewhat diminished. He is a very pale unhealthy-looking man, but the urine is of normal specific gravity and contains no sugar or albumen.

The first question to determine was the *diagnosis* of the case. There was no doubt as to its cystic character, but the opinion had been hazarded by some of those who had examined it, that it was a case of simple chronic abscess. At first sight the diurnal discharge of a large quantity of greenish pus might seem to favour that diagnosis. But on reasoning carefully over the facts of the case it would be seen that there were many things which were quite incompatible with that opinion.

(1) Its *duration*,—eight and twenty years. Many examples had been seen of sinuses remaining open for that period of time;—sinuses having at the bottom some irritant material, such as a piece of necrosed bone or connected with some hollow viscus of the body. But it was almost impossible to conceive that a simple collection of pus, whatever might be the cause from which it proceeds, should increase slowly and painlessly for twenty-four years and then rapidly for three years, but never once discharge itself until punctured by the surgeon's needle.

(2) *The absence of any redness about the skin.*—When a collection of pus exists in the body for any length of time it always works its way towards the surface,—it may be very slowly,—implicates the skin, causes redness there, and finally empties itself forming a sinus. Or if the cause which gives rise to the secretion of pus ceases to exist, then the amount already formed undergoes slow absorption; the fluid matter (liq. puris) is first taken up then the cells aggregate themselves together undergo fatty degeneration and finally become converted into a cheesy, or it may be even into a chalky, mass. These kinds of masses we occasionally find in the post-mortem room in connection with the psoas or iliacus muscles when the disease of the spine which has given rise to them has become cured before the pus coming from it has had time to make its way to the surface. In the present case there was no sign of any redness of the skin, it was true that the swelling had discharged itself, but this was at the point of the surgeon's puncture, and the material was described as of a greenish-yellow colour,—not of the cheesy white consistency which degenerating pus always assumes.

(3) *The absence of pain.*—Few chronic abscesses are so devoid of actual pain as the present case. The inconvenience of which he complained was from the

size and situation of the cyst which compelled him to keep the head constantly inclined towards the left side, and thus prevented him doing his work.

(4) *The total absence of any cause which could give rise to such a long continued formation of pus other than the one to be directly alluded to.*—There was nothing wrong with the spine, no pain on pressure, no angular curvature, nor was there anything amiss with the mouth of the patient.

The facts of the case seemed to point to a cystic tumour in connection with the parotid gland, possibly existing unnoticed ever since birth,—some such cystic tumour as we are accustomed to associate with the term "hydrocele of the neck." The data which supported this conclusion, besides those already alluded to, were :—

(*a*) *Its position when first noticed.*—At the angle of the jaw at a point where a portion of the parotid gland extends down towards the neck.

(*b*) *Its size and duration.*

(*c*) *The fact that it had been punctured and iodine injected.*—At this time it must have presented very different characters to those of a chronic abscess. Could we otherwise imagine a medical man injecting iodine into the cavity of a chronic abscess with the idea of closing it without even making a free incision into it. It was evident that he, at any rate, did not then regard it as such.

(*d*) *The character of the fluid which had been evacuated at various times.*—At first it was described as thin rather serous in character, then after the puncture and iodine injection it became yellowish-green in colour, and was evidently purulent. Mr. HOWSE had not seen the fluid which had been discharged since the patient had been in the Hospital, but he would venture to predict that the fluid would be found to be *not all pus*. He thought it likely that there would be a larger proportion of serum in it, and possibly some other cellular elements other than pus corpuscles.

[The patient was then called into the lecture theatre and the cyst immediately punctured with a fine trocar and canula. About 3 ozs. of greenish-yellow pus were then withdrawn, rather thicker in consistence than had been expected. Some of this was immediately placed under a microscope and spheroidal epithelial cells were shown to be mixed up with the pus corpuscles.]

The results of the puncture and microscopical examination must then be considered as establishing the diagnosis. The tumour was a large cyst, probably connected with one of the secreting glands, as shown by the spheroidal epithelium contained in the fluid in its interior, and most probably with the parotid. The fluid had remained simply serous until the cyst had been injected with iodine, which had had the effect—not of closing it, as the operator had no doubt hoped,—but of irritating the lining membrane and causing it to suppurate. It might then be looked upon as analagous to an ovarian cyst, full of pus, as they were not unfrequently found; to these cysts the term "chronic abscess" would of course not be applicable, though the main amount of the fluid in its interior were pus.

As regards the *treatment* there could not be the faintest doubt that the best thing was to cut it out, if that could be done without involving any vital structure. In fact there were only two alternatives :

(*a*) Its total extirpation.

(*b*) Opening the cyst and allowing the pus constantly to drain away, and then compelling it to granulate up from the bottom, either by stuffing it with gauze or applying some other irritant to the whole lining membrane.

The objection to the last mode of treatment was that the cyst-membrane was evidently a thick one; it was adherent to the skin at the point of puncture, and it was very probable that, even if it could be made to granulate from the bottom, the new material might partake of the character of the cyst wall and produce a fungating sarcoma of the neck which it would be impossible to remove at a later period on account of its deep connections. On the other hand, if the whole of the cyst could be removed all this risk would be avoided. And even if its deep connections should be found such as to make this impossible, we should be simply reduced to cutting away all the available portion of the cyst and leaving the rest to granulate ;—we should be therefore in much the same condition as in the second mode of treatment.

As regards the *prognosis*, that must depend greatly upon the possibility of total extirpation. The tumour was doubtless in its present condition a benign one. Though the patient appeared pale and unhealthy looking there appeared to be no visceral disease, and his ill-health was probably due to the daily loss of a large quantity of discharge, as well as to the mental distress which the tumour was causing him. On the whole, even taking all the risks of operation into account, the prognosis must be looked upon as being fairly favorable.

[The patient was then taken into the operating theatre and chloroform administered. A longitudinal incision was made over the cyst parallel with the anterior margin of the sterno-mastoid. It was, however, not found easy at first to effect a distinct separation between the cutaneous structures and the cyst-wall. The sac was therefore cut into and the fluid emptied out. The dissection now became easier and partly by the blunt scalpel, partly by tearing, the whole of the cyst was at length freed from its connections. These were, however, very extensive. The tumour extended posteriorly under the sterno-mastoid muscle; upwards, to the base of the skull internally to the mastoid process, and forwards along the course of the internal maxillary artery for a short distance, so that the finger could be passed inside the ramus of the jaw. On the floor of the wound, after its removal,

could be seen (1) the transverse process of the atlas with the transverse muscles attached to it; (2) the spinal accessory nerve, seen for about one inch, entering the sterno-mastoid; (3) the internal jugular vein, exposed along nearly the whole of the extent of the wound; (4) the large branch of communication of the internal jugular, with the temporo-facial vein. This was accidentally torn in the removal of the tumour, but instantly secured with a gut ligature. Neither the carotid artery nor the vagus nerve were visible, though the former could be felt pulsating under the distended internal jugular vein, nor was the decendens noni nerve seen. Very little blood was lost during the operation, the wound was closed with two gut sutures so as to permit free drainage.

In spite, however, of the very loose way in which the skin was drawn together primary union took place along nearly the whole of the incision and a slight amount of oozing occurring under the skin, a good deal of swelling ensued. On the third day after the operation a director was consequently introduced into the lowest part of the incision and the cutaneous adhesion forcibly broken down for about half an inch, about an ounce of mixed blood and pus came away, but some blood-clot evidently remained behind. A piece of oiled gauze was, therefore, introduced to prevent the aperture again closing, this was removed at the end of forty-eight hours, but the amount of discharge remained so small without any other signs of inflammation that it was clear the blood-clot must be slowly organizing or absorbing. Day by day the swelling gradually subsided until twenty-five days after the operation, the wound having entirely closed and the neck having resumed its normal appearance, he was discharged well.

The operation and all the subsequent dressings were performed under the usual carbolic spray. The amount of constitutional disturbance caused by the operation, beyond a little chloroform sickness, was exceedingly slight,—the temperature never rising above 99·3°.

In structures the cyst-wall was composed of sarcomatous tissue and there were numerous velvety small secondary growth attached to its lining membrane.]

ROYAL COLLEGE OF PHYSICIANS, LONDON.

EXAMINATION FOR THE LICENCE (Second Part or Pass),

APRIL, 1876.

MEDICAL ANATOMY AND THE PRINCIPLES AND PRACTICE OF MEDICINE.

1. Describe the Posterior Mediastinum; give its boundaries, its contents, its anatomical position, and its relation to the exterior of the body.

2. Describe the condition and the symptoms of Brain Disease produced by suppuration in the internal ear; and give the treatment you would adopt in such a case.

3. Describe the condition of the cavities and walls of the Heart induced respectively by incompetence of the Mitral Valve, of the Aortic Valve, of those two valves conjointly, and of obstruction through the mitral orifice, and give the signs of each of these affections.

4. Give a clinical history of a case of Enteric Fever; and state briefly the important points in which it differs from Typhus and relapsing Fevers, and from Acute Tuberculosis.

5. Describe the various causes of Vomiting, and give the treatment that you would adopt under the different circumstances.

6. State the injurious effects that may be produced by long continued excessive muscular exertion.

MIDWIFERY AND THE DISEASES OF WOMEN.

1. You are summoned to a woman within the limits of reproductive capacity; she is suffering from retention of urine, with some amount of dribbling, intense pain in the pelvis and abdomen, with forcing down or expulsive efforts. Discuss the probable conditions of the case; describe the means by which you would establish a diagnosis; and indicate briefly the treatment that should be adopted.

2. Describe the phenomena and nature of Menstruation. At what age does it generally appear, and disappear; what variations may occur in either case? Enumerate the causes which may produce a suspension of menstruation.

3. Distinguish the cases which call for Embryotomy from those which call for the Cæsarian section.

4. Describe the mode of the descent of the fœtal head when presenting by the brow. What interference is necessary, and say why the position is troublesome?

5. What is the arrangement of the various parts of the Fœtus in Utero at full term? To what aspect of the womb do the limbs most commonly present? What advantage does the knowledge of these points in the various methods of Turning give the operator?

MATERIA MEDICA,

AND CHEMISTRY IN ITS APPLICATIONS TO

PATHOLOGY, PHARMACY, AND TOXICOLOGY.

1. Mention the preparations of Cantharides, and give an account of their uses and abuses.

2. Mention the Anthelmintic remedies, and, stating the dose, describe the action and use of each.

3. What Drugs (and their preparations) are obtained from the Cucurbitaceæ? State the doses in which you would prescribe them, and the effects you would expect from such doses.

4. Give the composition of the Air, and how it is determined, What chemical changes are produced by Respiration? What products are formed by the burning of Coal Gas in air?

5. What are the chemical properties of Iodine? From what sources and by what means is it prepared? What weight of Iodine is there in one ounce of Iodide of Potassium?

6. What is the composition of Tartar Emetic, how is it prepared, and what test would you apply to a white powder to prove it to be Tartar Emetic?

PRIMARY EXAMINATION FOR THE LICENCE.

1. What are the differences between the male and female pelvis.

2. Enumerate the muscles of respiration, pointing out the mechanical action of each, and distinguishing between those normally and those occasionally used.

3. Describe the structures which lie between Poupart's ligament and the bone.

4. Describe the changes which food undergoes in the stomach. How are these changes effected?

5. What are the sources of animal heat; how is it maintained at a nearly uniform standard in the body?

6. Enumerate the structures which form the placenta.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

The following questions were given last Month at the final examination for the diploma of member :—

SURGERY AND SURGICAL ANATOMY.

1. Enumerate in their proper relations the various structures which would require division in excision of the astragalus.

2. What are the structures exposed to view by the removal of the entire sterno-cleido-mastoideus muscle? Mention the chief points of surgical interest associated with this region.

3. What causes may prevent union after simple fracture of the shaft of a long bone? Describe the appropriate treatment under different circumstances.

4. What may be the effects of a penetrating wound of the cornea? How would you treat its various consequences?

5. Describe the consequences of acute inflammation of cancellous tissue of bone, such as that of os calcis, and the process of repair.

6. Describe the dislocation of the head of the femur when resting in the ischiatic notch, and enumerate the parts likely to be lacerated. State and explain the nature of the deformity attending this injury.

MEDICINE.

1. Describe a case of typhoid fever, giving the appearances detected in the body on examination after death in the different stages of the disease; and state how you would distinguish such a case from one of typhus and of relapsing fever.

2. You are called to see a patient who has been found insensible in the street; what are the different causes on which his condition may depend? and how would you severally distinguish them?

3. What are the proportions of the chief ingredients in the following preparations of the British Pharmacopœia :— tinctura opii, tinctura camphoræ composita, pulvis ipecacuanhæ compositus, pulvis cretæ aromaticus cum opio, pilula ipecacuanhæ cum scillâ, pilula aloës et ferri, liquor arsenicalis, liquor morphiæ hydrochloratis, vinum antimoniale, vinum opii? and state what are the purposes for which they are employed, and the doses in which they are to be prescribed.

PASS LIST.

UNIVERSITY OF ABERDEEN.

Messrs. Seymour and W. Culver James passed the third professional examination and took the degrees of M.B. and C.M. last month. Mr. E. O. Giblin also passed the first and second M.B. examination with credit.

ROYAL COLLEGE OF PHYSICIANS.

At the April examination for the Licence the following gentlemen passed :—

Messrs. H. C. Burton, M.R.C.S., J. J. Newman, M.R.C.S., St. C. B. Shadwell, M.R.C.S., and C. E. Winckworth, M.R.C.S.

ROYAL COLLEGE OF SURGEONS.

The following gentlemen having passed the required examinations were admitted members :—

E. Bowen L.S.A., J. Weston Bull, A. G. Barrs, M.B. and C.M. Edin., F. A. Hyne, L.S.A., T. R. Hudson, L.S.A.

In the first batch for the Primary examination the following were successful :—

T. W. Fuller, M. J. Hart, J. G. S. Lewis, A. E. Maylard, G. B. W. Messum, E. J. Morley, R. Parry, H. O. Stuart, J. F. Tabb.

Primary Examination second batch, the following passed:— Messrs. L. Bates, E. W. Deare, R. A. Ross, Charles Wood, R. W. White, W. D. Hartley, J. R. Harris, R. J. Bryden, A. G. Wells, A. B. Hammond, Owen Griffiths, John Brock, John Davies, Edward Penny, Morris F. Cock.

THE BIENNIAL.

The Biennial Dinner was held at Willis' Rooms, on May 5th. Dr. Wilks in the chair. About three hundred and twenty sat down. The dinner was very well served. On the Chairman's right sat Lord Lawrence; on his left, Mr. Turner. To the right of the President sat Sir James Paget, and next to him Sir William Gull. Dr. Risdon Bennet sat on the Treasurer's left. After the Queen, Royal Family, and Army and Navy and Reserve, came the toast of the evening "Prosperity to the School of Medicine and Surgery attached to Guy's Hospital." The next toast, "The President, Treasurer, and Governors" was to have been proposed by Mr. Cook, but in his unavoidable absence through illness, Dr. Habershon proposed the toast. Lord Lawrence and Mr. Turner responded. Next came "The Universities, Royal College of Physicians, Royal College of Surgeons, and the Society of Apothecaries," Dr. Bennet responded for the Physicians, and Sir James Paget in his usual clear, easy, and flowing style, for the Surgeons, Mr. Hilton then proposed "The health of the Chairman," and Dr. Wilks replied. "The honorary and consulting Medical and Surgical Staff" was responded to by Dr. Owen Rees, in an amusing and well delivered speech. He then proposed the "Acting Staff and Teachers," to which Dr. Habershon and Mr. Cooper Forster replied. Sir William Gull then proposed the "Past and Present Students." In a well delivered speech he paid not a small compliment to Students by calling his "The toast of the evening," Mr. Lloyd replied in an energetic speech for the past, and Mr. H. N. Smith, House Physician, and C. J. Symonds, House Surgeon, for the Present Students. The last toast which was given by the Chairman was "The health of the Honorary Secretary" Mr. Durham in rising to respond was greeted with loud cheers and for some time could not speak. He said this was the last time he was to fill the post. The Glee Club, which had given several songs between the toasts, among others "Auld Lang Syne," which was sung by all, the Company with joined hands now sang "He's a jolly good Fellow," and the dinner was over.

Through the exertions of the Honorary Secretary the arrangements were very complete, old friends being placed side by side as far as possible. Altogether the dinner was a great success, many wishing that it occured annually instead of biennially.

STATISTICAL REPORT FOR FEBRUARY.

Number of women attended, 200; single births, 199; dual, 1.

Number of children born, 200; males alive, 110; males dead, 5; females alive, 80; females dead, 3.

Presentations: vertex, 190; breech, 3; face, 2; foot, 2; funis and vertex, 1; funis and hand, 1; not recorded, 2.

Operations: forceps, 2; forceps and subsquently craniotomy, 1.

Women in 1st confinement,			17	Women in 2nd confinement,			25
,,	3rd	,,	22	,,	4th	,,	42
,,	5th	,,	24	,,	6th	,,	16
,,	7th	,,	10	,,	8th	,,	13
,,	9th	,,	14	,,	10th	,,	6
,,	11th	,,	5	,,	12th	,,	1
,,	13th	,,	2	,,	15th	,,	1
Not recorded			2				

One maternal death.

EDWARD AMPHLETT,
Junior for March

GUY'S HOSPITAL GAZETTE,
MAY, 1876.

WILLIAM BARTLETT HINTON.

It is a painful task to record the death of any one, but how much more so of a fellow-student; for, what a blank is created when one of our number is suddenly taken from us by death; not in old age, but in youth and vigour: surely it cannot but make us all pause and consider how short and uncertain is life and how near the grave. Truly "In the midst of life we are in death."

It seems but a week ago since poor Hinton was among us, well and hearty, with a pleasant word for every one, and when we saw him, how little did any of us dream that in a few short days he would be no more. Most of us knew him, but it was only to a few that his best qualities were so plain and so admired. Like his father he was a genius, and few of his fellow-students possessed more, if so much, originality; yet he was so retiring and unostentatious of his attainments, that only his intimate friends could appreciate his true worth, and only they can fully realize their loss of a generous, good-hearted, and true friend.

He was only ill some four or five days, during which time he was attended by Dr. Wilks, whose kindness was great, going to see him twice a day, but unhappily without avail, for he died on Monday, April 17th, we believe, from Pleuro-pneumonia.

W. B. Hinton was an Undergraduate of London University, having passed his Preliminary Scientific with honors in Chemistry, in which subject he was especially proficient, and had scarcely an equal among his fellow-students.

Wednesday the 10th was Presentation Day at the London University. Dr. THOS. EASTES, and Mr. L. WOOLDREDGE were presented by Dr. WILKS, from Guy's. The former for the Gold Medal at the late M. D., the latter for the Arnott Medal at Exhibition at the Preliminary Scientific.

NEW SCHOLARSHIPS.

We are pleased to be able to announce that two new scholarships have recently been bequeathed to our Medical School by gentlemen who formerly studied at this Hospital. Mr. SANDS COX, of Birmingham, has left £500 (invested so as to produce £15 a year) the interest upon which is to be competed for once in three years. The other, an anatomical prize, has been left by MICHAEL HARRIS, M.B., whose sudden death we had recently to lament. To found the prize £250 has been invested so as to produce £10 a year, and the interest will be competed for annually.

SPECIFIC REMEDIES.

Being the Paper read before the Physical Society by MR. MACKERN, *March 18th*, 1876.

(Continued from page 46.)

IV.—Drugs acting on the heart. Attention was first drawn to the wonderful selective power of some drugs in attacking certain nerves or even portions of nerves, resembling in this way morbid processes.

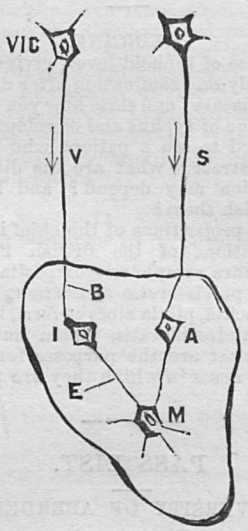


DIAGRAM ILLUSTRATING INTRACARDIAC CENTRES.

V.—Vagus proceeding from VIC, its centre in the medulla, to I, the inhibitory intracardiac centre. B is the intermediate apparatus connecting V with the ganglion.

S.—Sympathetic quickening fibre going to A, the accelerator intracardiac centre.

M.—Motor intracardiac centre inhibited by fibre E from the ganglion I. Stimulation of V, B, or I, leads to slowing of the heart; while paralysis of the same, or division of V, leads to quickening, because the ganglion A can then act unimpeded on the motor ganglion M.

Atropia was proved to paralyse some part of the inhibitory apparatus inside the heart, most probably the fibres E; the ganglion A can now act unimpeded on M, and the heart's action is therefore quickened, just as cutting the reins would allow a carriage-horse to run away. The action of Atropine then is to quicken the heart.

Calabar Bean is perfectly antagonistic to Atropia; the experiments of Dr. FRASER and the labours of Dr. BENNETT'S Edinburgh Committee have proved this. This drug stimulates the connecting fibres E, the diastole becomes gradually more and more prolonged and the heart stops eventually in complete

diastolic arrest. Calabar Bean is therefore the antidote in Belladonna poisoning, and several lives have been saved by a knowledge of this.

Nicotia quickens the heart, but not in the same way as Atropia. It probably paralyses the fibres B.

Muscarin stops the heart slowly but completely by stimulating the ganglion I.

Aconite slows the heart when given in moderate doses; as it will act on the excised heart, it stimulates the ganglion I, but it also irritates VIC the centre in the medulla, which depresses the heart still more; besides this, it also inhibits the vasomotor centre, hence it is a great depressant to the circulation and superior to Antimony. Aconite by dilating the arterioles all over the body doubles the capacity of the vascular system, and thus "bleeds a man into his own vessels." It is a specific in simple uncomplicated inflammations, for in these conditions we have (*a*) quick action of the heart; (*b*) hot dry skin with *contracted* arterioles. The high temperatures of specific fevers are not so much influenced by Aconite, because here we have to deal with a specific cause for the high temperature. Aconite is especially valuable in acute tonsillitis if given early enough; it has also done great good in rheumatic fever and pneumonia. It is well worthy of a trial in pleurisy, erysipelas, and scarlatina. In pericarditis accompanied by throbbing and pain, Aconite quiets the heart and so gives relief.

Digitalis in moderate doses (1) stimulates the heart muscle, probably through the ganglion M, and therefore the beats are much increased in force; in fact when Digitaline is applied directly to the heart it becomes quite hard and white from the blood being all squeezed out through the very energy of the contractions; (2) it stimulates the vasomotor centre, giving rise to much increased blood pressure; (3) it also stimulates some part of the inhibitory intracardiac apparatus (perhaps I), so that the period of diastole is remarkably prolonged. Digitalis then, in man, prolongs the period of diastole, thus giving the ventricles time to fill up with more blood than usual, and also increases the muscular power of the heart; so that, when it contracts, a greater volume of blood is sent with greater force into the arterial system; it also, by contracting the arterioles, raises the blood pressure. Almost nothing but common sense is now needed to apply these facts to the treatment of heart disease. If what has been said above is true, Digitalis ought to be useful when there is a deficiency of heart power; and it is in simple dilatation, with unimpaired valves, that its most wonderful power is exerted most favourably. Digitalis is not a rag to stop up a hole; it cannot tighten a leaking valve; it cannot smooth down and open a contracted orifice, but in valvular lesions it does a vast amount of good by assisting the compensatory hypertrophy (structural not functional), which is nature's attempt to prevent the ill effects of those diseases.

(*a*) Mitral stenosis.—the diastole being lengthened by Digitalis, the auricle is afforded more time to empty itself through the narrowed orifice, and at the same time strengthened in its contractions. Evidently then the left ventricle will have more to contract on than before, and more blood will be sent into the circulation.

(*b*) Mitral insufficiency.—The increased power of the systole will throw proportionately more blood through the aortic orifice than through the partially closed valve. As the force and rapidity of the current increases the friction becomes greater at each orifice, but the ratio of increase is evidently much higher in the small choked mitral leak, and hence the larger aortic opening gains upon the smaller mitral as the cardiac power is increased, and more blood passing into the systemic circulation, the pulmonic is relieved.

(*c*) Aortic constriction.—The drug is useful when the heart power begins to fail; but if there be at the same time hypertrophy, it does harm. In aortic regurgitation it does good under the same conditions.

(*d*) Simple hypertrophy.—It is evident that in this case Digitalis will do much harm.

(*e*) Irritable heart with muscular weakness.—It does good.

(*f*) Aortic aneurisms, or where capillary atheroma is suspected.—It must be used very cautiously.

(*g*) Cardiac dropsy.—Digitalis does immense good in two ways, (1) by strengthening the circulation through the heart; (2) by increasing the blood pressure in the renal artery it causes an increased secretion of watery urine. If LUDWIG'S "Regulator" kidney theory be correct, the action of Digitalis as a diuretic is beautifully explained by its effect on the renal artery.

V.—Hypnotics or medicines causing sleep.—Sleep is a condition of physiological cerebral anæmia; this follows from the law that the functional activity of an organ is in direct relation to its blood supply, and it has also been experimentally proved to be so by DURHAM and HAMMOND. A diminution of the activity of the brain cells is therefore also associated with sleep. Anything then that tends to increase the supply of blood to the brain, or to increase the activity of the brain cells, tends to prevent sleep: thus, cold contracts the capillaries of the skin, blood pressure is raised and more blood is driven to the brain; and everyone knows how it is impossible often to go to sleep with cold feet, &c. Again, in a man who is using his brains too much, the repeated calls of the brain cells for more blood produces cerebral hyperæmia, or even partial vasomotor paralysis according to Niemeyer, and sleeplessness is the result.

Opium.—Of all hypnotics, perhaps the one most in use; yet from the very energy of its poisonous effects, it is the one we should be most careful of using. Because Opium sends a man off into a deep sleep and stupor, it does not follow that this drug will cure every case of insomnia; how often, however, do we see a restless patient stupified (*stunned* as Dr. WILKS says) by a dose of Opium; the prescriber, meanwhile, congratulating himself on having so effectually quieted the patient. The indiscriminate and dangerous use of this hypnotic is well seen in the treatment of delirium tremens by large stupifying doses. Opium has in all animals a double action—on the cord and brain; in frogs, which are "all spinal cord," it produces tetanic convulsions, and in man, where the brain is, or ought to be, specially developed, it brings heavy sleep and stupor. In some low tribes in Asia, in whom, I suppose, brain tissue has not yet reached a sufficient stage of evolution, it produces a sort of madness; this effect is also occasionally seen in Europeans. Opium inhibits the receptive power of the brain cells, it directly poisons the cerebum, the sleep at first induced soon passing into stupor and coma. But Opium exerts its most wonderful power in the relief of pain, and it is in *sleeplessness with pain for its cause* that this drug is chiefly indicated. Pain excites the brain cells and raises blood pressure; Opium, by dispersing the pain, relieves the brain, and sleep is obtained. Where great vascular excitement co-exists with pain, as in deep seated inflammations, a depressant, such as Aconite, should be combined with the Opium. Graves, of Dublin, used Opium and Antimony.

Chloral Hydrate.—In moderate doses the most prominent result is a quiet sleep as closely allied as possible to natural sleep. Liebrich says the sleep is due to the liberation of chloroform from the chloral by the alkaline blood, but lately some notable experiments have been made with "salt" frogs, that is to say, frogs whose blood has been replaced by a neutral solution of salt, in these abnormal frogs chloral acted exactly as in normal frogs; chloral, therefore, acts directly on the brain, but it also reduces blood pressure and brings down the temperature most decidedly; hence it is most useful as a hypnotic in cases of sleeplessness associated with pyrexia and general vascular excitement. In severe cases of chorea large doses of chloral often produce deep and refreshing sleep, the patient waking up much calmer; here the mischievous use of Opium would only temporarily stun him and

leave him worse than before. In the delirium of acute fevers in children it is of immense use when combined with Bromide of Potassium. Chloral is useless in sleeplessness due to pain.

Bromide of Potassium.—The symptoms produced by a poisonous dose of Bromide are:—a sense of mental weakness, heaviness of intellect, failure of memory, partial aphasia, great somnolence and depression of spirits; added to this the whole muscular system is relaxed, the special sensations become blunted and finally disappear, and general paralysis supervenes. How does it produce sleep? Amory, who has written two volumes on the action of this medicine, says that the sleep is due to the anæmia of the brain produced by vasomotor spasm, the effect of the drug. The evidence now is, that though the Bromide is probably capable of producing vasomotor spasm, the cerebral symptoms enumerated above are more than can be assigned to this as their cause. Bromide of Potassium acts on a bared nerve trunk, it paralyses the ends of sensory nerves, it acts on the brain directly as a sedative. This medicine is contraindicated where there is much depression or exhaustion. In cases of sleeplessness due to nervous excitement the Bromide is very valuable, as in the insomnia often following excessive mental toil, anxiety, or other nervous strains. In sleeplessness due to the irritation of the peripheral ends of sensory nerves it ought to do good, and so it has been found very useful in excitement of the genital functions, and in the peculiar train of symptoms co-existing with uterine disorders, or with the condition known as "change of life" in women.

Electrifying Room.

REPORT ON CASES TREATED IN THE ELECTRIFYING ROOM, FROM 1864 TO 1875 INCLUSIVE.

By R. J. PYE-SMITH and J. H. SANDY.

(*Continued from page* 36.)

Erratum.—At the end of the last paragraph but one in the last Report *(Infantile Paralysis)* the following sentence was omitted.

Galvanism was employed in 19 cases, of which 1 was cured, 14 were improved, and 4 not improved.

PARALYSIS AGITANS.—Of this affection 12 cases are reported. The average duration of the symptoms previous to treatment was one year; the extremes, one month and sixteen years. The average period of treatment was three months; the extremes, one month and five months. 9 cases were treated by Galvanism continuously applied to the spine for about two hours at a time, with or without Galvanism or Faradism to the extremities; of these 5 were considerably improved, 3 were not improved, and 1 was made worse. 2 were treated by Galvanism to the affected extremities, 1 was improved and 1 was not improved. 1 was treated by Faradism to the extremities and not improved.

Thus half the cases treated received considerable benefit. A few other cases of improvement under the application of the continuous Galvanic current to the spine are reported by authors.

PROGRESSIVE MUSCULAR ATROPHY.—Of this disease 11 cases are reported. Its average duration was two years; the extremes being six weeks and twelve years. The treatment was continued on an average for two months; the extremes being two weeks and five months. 8 cases were treated by Galvanism of the spine with or without Faradism of the extremities, 6 were improved and 2 not improved. Galvanism was applied to the extremities in 2 cases and both were improved. In 1 case Faradism to the extremities was employed with improvement.

In only 1 of the above cases was the improvement effected very great; in this case the upper extremities alone were affected and were treated by the local application of Galvanism. ALTHAUS speaks strongly in favour of Galvanism to the spine or to the cervical sympathetic.

LOCOMOTOR ATAXY.—Of the 40 cases we have 25 reported. The average duration of symptoms was two years; the extremes, six weeks and eight years. The average length of treatment was two months; the extremes, one week and seven months. 22 cases were treated by Galvanism to the spine, with or without Galvanism or Faradism to the extremities; of these cases 14 were improved and 8 not improved. 2 were treated by Galvanism to the extremities and both were improved. 1 was treated by Faradism to the spine and improved.

Of the 14 cases improved by Galvanism to the spine 6 were "greatly" relieved, both as to the ataxic symptoms and as to pain. 1 of those treated by Galvanism to the extremities was also "greatly" improved; so that on the whole the treatment in this disease, though not curative, seems to be decidedly beneficial in the majority of cases. Authorities also speak highly of Galvanism to the spine and of some other forms of electrical treatment.

CHOREA.—Of this disease only 9 cases are reported since the beginning of 1872. The average duration of the attack was three months, the extremes being two months and six months. The average period of treatment was one month; the extremes, three days and three months. Galvanism of the spine with or without Galvanism of the extremities, was employed in 5 cases, 4 of which were cured and 1 not improved. Faradism of the extremities was performed in 1 case which was improved. Franklinism was adopted in 3 cases, which were all cured. In addition to these cases 20 others are reported between 1864 and 1872. They are all stated to have been "electrified"—probably by the Franklinic method, sparks being taken from the spine after charging the patient.—18 of these cases were cured, 1 improved and 1 not improved.

Thus in all we have 29 cases, of which 25 are reported as cured, the majority having been treated by Franklinism. In early numbers of the Guy's Reports (see the volumes for 1837, 1841, and 1853) ADDISON, GOLDING BIRD, and GULL have recorded upwards of 60 cases nearly all of which were cured under a few weeks' treatment by sparks drawn from the spine. Other authorities speak highly of the value of Galvanism and of Faradism. REYNOLDS throws doubt on the efficacy of these and other agents in a disease which has so great a tendency to get well of itself.

SCRIVENER'S CRAMP.—Only 3 Cases are reported. One which had lasted two months was cured by Galvanism; another of four years standing was not improved by a fortnight's Galvanism, and the third which lasted nine months was much improved by three months' treatment with Galvanism on POORE's plan.

Since the above cases were reported, several others have been successfully treated by the method adopted by POORE (see his "Text Book of Electricity," and the "Guy's Hospital Gazette" for 14th August, 1875). ALTHAUS recommends Galvanism to the spine or to the cervical sympathetic.

RHEUMATISM.—Under this head we have included 16 cases reported as "Subacute Rheumatism," "Chronic Rheumatism," or "Stiffness after Rheumatic Fever." The average duration of the disease previous to treatment was four months, the extremes being one month and eight months. The average period of treatment was six weeks, the extremes being two weeks and four months. Galvanism was applied to the affected joints in 5 cases, all of which were improved. Faradism was employed in 11 cases, 9 of which were improved and 2 not improved.

In addition to these cases there was 1 case of Gonorrhœal Rheumatism which was benefited by Galvanism. There were also 6 cases of Osteo-arthritis of an average duration of seven months, and all under treatment for about one month. 4 were treated by Galvanism, 2 being improved and 2 not improved;

2 were treated by Faradism, 1 being improved and 1 not improved.

Authorities speak of both Galvanism and Faradism as being useful in cases where there is pain and stiffness in the use of joints after Rheumatic fever or other forms of arthritis.

(To be continued.)

DYSPHAGIA OF ORGANIC ORIGIN.

23 cases of *malignant disease* leading to the *Dysphagia* were found in the P.M. records for the seven years 1868—74, and there were two cases of cancer in œsophagus and one at cardiac orifice of stomach, which do not appear to have had dysphagia.

Males, 19; females, 4.

Age:—youngest 28 (mediastinal tumour); eldest, 73.—Average, 54.

SEAT OF STRICTURE.

In Pharynx, or commencement of Œsophagus, 8; including growths near cardiac, 2.

Opposite Bifurcation of Trachea, 4.

Near Cardiac end of stomach, 7; including growths at commencement. 1.

Tube involved in Mediastinal cancer, 3; including growths between these points, 1.

Not mentioned, 1.

9 cases of *Dysphagia* due to *Aortic Aneurism* were found in the P.M. records for the seven years 1868—74.

MODE OF PRESSURE.

On Trachea only	2
General pressure only	2
Aneurism in Posterior Mediastinum ...	2
Œsophagus intimately involved	2
Aneurism at root of Diaphragm	1
Average age, 39. All males.	—
	9

J. M. HOBSON.

The Surgery.

The following are some of the most interesting cases treated in the surgery during March and April:

FRACTURES.

Inferior Maxilla	4
Clavicle	22
Humerus	9
„ Shaft	3
„ Lower End ...	5
„ Neck	1
Radius	20
Ulna	4
„ Shaft	1
„ Olecranon	3
Radius and Ulna	4
Metacarpal Bones	4
Phalanges	3
Ribs	41
Metatarsal ... ...(1st)	1

DISLOCATIONS.

Humerus	11
„ Sub-Coracoid ...	6
„ Sub-Glenoid ...	5
Clavicle from Sternum ...	1
Scapula from Clavicle ...	2
„ „ „ partial	3
Inferior Maxilla	2
Thumb	3
Patella (partial outwards)	1
Sprained Ankle	47
„ Wrist	36

Of the fractured Clavicles all, except one, were due to a fall on the shoulder, this one being broken by direct violence from the handle of a crane. One was broken in the small curve; one at the acromial end; one complicated dislocation of the scapula, a small corner of the acromial end being broken off; one was a greenstick, the angle of the bend looking upwards; and one occurred in a child eleven days old, there being no history of injury.

Of the fractures of the lower end of the Humerus, one was a separation of the epiphysis; one a fracture just above the condyles; and three were fractures of the internal condyle.

The fracture of the neck occurred in an old man, and was complicated with dislocation forwards of the head. There was in this case 1½ in. increased measurement round the injured shoulder, 1 in. increase of the anterior-posterior diameter, and some shortening. The head could not be reduced so the bone was bandaged to the side, and when next seen (14 days after) the dislocation was less apparent, though the measurement had decreased only ¼ in. each way.

The fractures of the Forearm have occurred in various ways; the Radius from direct violence and from a fall on the extended hand, the fracture being about the middle of the shaft. In one case the patient had been fighting, and when striking a man with the closed fist, the Radius broke about the centre of the shaft. The Radius and Ulna were broken in one case from a fall on the extended hand. In another case the completely extended hand was resting against a door post, the door closing suddenly struck the elbow, thus the Radius and Ulna were fractured, there being a considerable angle towards the ulnar side. Two cases were greenstick of Radius and Ulna, the bend being forwards in both cases.

The treatment adopted in fractured Olecranon, was to apply a straight anterior splint for three weeks and then commence passive motion daily, re-applying the splint each day. The results have been good, but in one case there was great stiffness in the joint. An outside splint jointed at the elbow and working on a pivot by an india rubber accumulator brought the arm gradually up.

Hammond's wire splint was applied in one case of fractured jaw. The fracture was between the canine and lateral incisor. In six days the boy was eating meat and bread, and felt no inconvenience from the splint. The opposition continues perfect.

The dislocations of the Humerus were generally reduced without chloroform, by first making extension outwards at a right angle with the trunk, the heel being in the axilla, and then bringing the arm round. This method requires two people and is very successful, the head often slipping in while the arm is being pulled outwards. The subsequent treatment has been to bandage the arm to the side for a fortnight, to wear a sling for another fortnight, and then to commence passive motion.

Two of the Sub-glenoid cases were not pure examples of this dislocation, there being little increased measurement round the shoulder and slight lengthening only. The head appeared to be forward and downward. In a case of pure Sub-glenoid in a woman, there was an increase of 2½ in. round the affected shoulder and 1½ in. lengthening. The cases of injury to or dislocation of the Acromio-Clavicular joint, all occurred from falls on the shoulder, one was complicated with fracture of the tip of the Acromial end of the Clavicle. They were treated by putting the arm up as in fractured Clavicle, and applying spirit lotion. In one case of complete dislocation there was fair use of the arm in three weeks, but the deformity remained. In the dislocation of the Clavicle from the Sternum, the bone went forwards. One of the inferior maxilla cases was double.

Amongst general cases the following were the most interesting:—

Four cases of Circumcision in children; five of Hydrocele treated by tapping; two of wound of the Cornea; in one of these the anterior chamber was perforated and the iris prolapsed, Atropine drops gr. iv. to ℥ j. were applied and the eye tied up with Lot. Belladonna, no iritis ensued and the eye completely recovered, the pupil being, however, one-sided on account of the prolapse, this will be remedied by an Iridectomy on the opposite side of the iris.

There have been ten cases of epididymitis. In one, in which the body also was affected, a solution of Nitrate of Silver ℥ ij. to ℥ j. was applied, relief was experienced in a few hours, the pain having been excruciating, and in a week the man was ready for work. The skin was not blistered.

CLINICAL THERMOMETERS.

We have recently received from Messrs. CASELLA & Co., a specimen of their "Patent Clinical Thermometer" and have every reason to be satisfied with it, as being the best of its kind that we have seen. Its chief recommendation is the indestructibility of the index, which on account of the arrangement of constructions and dilations, cannot be returned into the bulb by the severest shaking which carelessness or accident is likely to apply to it. Such an advantage will be fully appreciated by any who are in the habit of using a thermometer.

Another recommendation of this instrument is the indelibility of the black markings of the scale. The ease with which the markings of most thermometers rub off after insertion in a hot moist axilla, as in rheumatism, is considerably annoying, and make it a great desideratum that some means of prevention for this be found. We have subjected the specimen sent us to some severe tests, and find that the markings are much more permament than in any other we have seen. The quality of indelibility, applies we believe, to all the thermometers made by Messrs. CASELLA, and undoubtedly greatly increases their value. On the other hand the indestructability of the index, only exists in the "Patent Clinical Thermometer" a more expensive article. The case in which the Thermometer is kept is both neat and strong, and being made of wood not nearly so liable to fracture at the base of the screw, as the composition generally employed.

ON DUTY FOR MAY.

House Physicians:—Messrs. H. N. SMITH and W. J. TYSON.
Junior House Physician:—Mr. H. F. LANCASTER.
House Surgeon:—Mr. C. J. SYMONDS.
Junior House Surgeon:—Mr. R. E. CARRINGTON.
Senior Resident Obstetric:—Mr. H. L. CHAMPNEYS.
Junior Resident Obstetric:—Mr. A. DE W. BAKER.

RESIDENT DRESSERS.

For the weeks commencing:—
May 3rd, Mr. WELCHMAN (Mr. Durham.)
„ 10th, Mr. BEVAN (Mr. Howse.)
„ 17th, Mr. PICKERING (Mr. Forster.)
„ 24th, Mr. REYNOLDS (Mr. Bryant.)
„ 31st, Mr. ELCUM (Mr Durham.)

The Surgical Wards.

There has been several cases of interest in the Wards lately amongst which may be mentioned the following:

Aneurisms. Three cases of true Aneurism have been cured. One femoral, by 23 hours continous application of a weight to the artery in Scarpa's triangle under supervision. Another popliteal was cured by the application of digital pressure for 3 hours, complete flexion for 3 hours, and partial flexion during 4 days. The third was treated by digital pressure, weight and tourniquet successively. It was popliteal, and pulsation ceased after a few days treatment.

There was an interesting case of diffused traumatic aneurism in Job Ward in February last. The injury was a fall on the shoulder producing much swelling, but no pulsation nor fracture was detected. About 40 days after the injury, pulsation was felt on the inner side of the upper part of the arm and the subclavian artery was accordingly ligatured by Mr. BRYANT. On the 12th day after the operation dyspnœa and prostration set in, and the patient soon succumbed. The autopsy showed that a portion of the humerus had been split off carrying with it the circumflex and subscapular arteries, which were torn from the axilliary at their origin. There was pyæmic gangrene of the left hand and pleurisy.

On March 5th, a patient was admitted with a large inguinal hernia, giving use to severe symptoms, including peritonitis and suppuration about the inguinal canal. Strangulation was of 3½ days duration. An operation for artificial anus was performed, the bowel being opened and stitched to the lips of the incision and the structure divided. The patient survived 6 days.

A child, æt. 6 months, was recently operated on for the radical cure of inguinal hernia. Mr. DURHAM exposed and ligatured, the sac emptied of its contents, antiseptic treatment was adopted. The child is doing very well. The bowel keeps up.

Some interesting cases of tumours have been in the Wards. One of recurrent sarcoma of super-maxilliary bone was removed leaving a deep chasm, exposing the nasal and buccal fossœ. Two large gluteal tumours starting from the bursæ over the tubera ischii, and finally infiltrating the skin were successfully excised. An exploratory incision was made over a supposed subclavian tumour, but nothing but an enlarged omo-hyoid muscle was discovered, although previously, there seemed good evidence of the existence of a mass of considerable hardness. The case was in Dorcas.

A patient in Job Ward suffering from hyperostosis, was a subject of deep pathological interest. The tibiæ, femora and clavicles were the bones most markedly affected, and not only were they enlarged but also softened, so that they bent under the man's weight. He had an attack of renal colic during his stay. A dietary was adopted as the only treatment for this abnormal osteal formation.

Teale's amputation has twice been performed for disease of the foot, during the last month. Both cases are nearly well.

Otis' operation of dilatation and internal division of stricture, has been very advantageously employed in several cases in Lazarus.

The splints devised by THOMAS of Liverpool for treatment of Hip and Knee diseases, have been applied in several cases lately, and can now be seen in Martha and Dorcas.

Medical Wards.

CLINICAL—TYPHUS—2 CASES.

1.—Catherine B., æt. 36, admitted March 23rd, died March 29th. Taken with diarrhœa 14 days before, lasting a week, then general feeling of illness for five or six days, then rash noticed. A girl in the same house convalescent from typhoid. Rash out on face, limbs and trunk, not petechial, no diarrhœa. First two days, pulse 120—130, feeble action of heart, temperature 103·4°—104·6°, delirium at night.

25th.—Pulse to 140, rash beginning to fade.

26th.—Pulse to 156.

27th.—Petechial well marked, pulse to 160.

28th.—All the rash petechial. Taking large quantities of brandy, about 20 ounces the day before.

29th.—1·30 a.m., pulse 150, respiration 52, delirious, face dusky. 3·30 a.m., twitching of muscles, temperature 104.2°.

P.M.—Petechial spots still visible, Peyer's patches unaffected, solid organs softened, spleen 13 ounces.

2.—Admitted Monday, April 17th.—Dockyard labourer, æt. 31; been out of work lately, never had D.T. before (brother said). Came home to his lodgings the prievous Wednesday

very ill; had been staying at a publichouse for a week up to then. Was very delirious till admission. Symptoms of D.T. Busy delirium, tremulous tongue, constant tremulous movements of hands, tongue brown, dry and furred. Temperature 104·1°, pulse 90 (irregular), respiration 42. No diarrhœa. Petechial rash, mostly on chest and abdomen, but also on extremities slightly, spots pretty closely set.

19th.—Morning, temperature 103°, evening, 103·3°.

20th.—Morning, temperature 103·7°, evening, 101·7°.

21st.—Morning, temperature 102°, evening, 98·5°.

22nd.—Morning, temperature 101·8°, evening, 99·2°.

23rd.—Temperature 100°, rash considerably faded, not entirely petechial, pulse regular, tongue much cleaner. Did not sleep in the previous night, more noisy, got out of bed in the afternoon, thought he was chasing people about his bed. All stimulants taken off; two 30 grain doses of chloral hydr. given at night.

24.—Slept in the night, and been quieter all day. Evening, temperature 98·6°. Rep. houst. chloral.

EPILEPSY—No. 14.

Æt. 43. Picked up insensible on evening of April 18th, and remained so in the ward from 9 p.m. till next morning. Had 34 fits in three hours, affecting right side of face and right arm and leg, sometimes confined to face alone, at others affecting limbs afterwards, duration about half a miuute, no lividity induced, no rise of temperature.

19th.—Lay in bed very imperfectly conscious, but colour restored to face, eyes turned to right side and with oscillatory movement, no paralysis, temperature normal. 5 p.m., 3 fits in 25 minutes.

20th—Much more conscious, but mind confused, not any recollection about fits, temperature 97·8°.

21st.—Quite conscious.

22nd.—Went home, no more fits.

The fits were not influenced by Nitrite of Amyl. No evidence of syphilis. About a month ago, for the first time, had a fit which lasted about half an hour, and was accompanied with loss of consciousness.

CEREBRAL HÆMORRHAGE—No. 13.

Æt. 41. On evening of 13th April told his companions that he had lost the use of his left arm, and then was seen to fall down and to have lost the use of his left leg. Paralysis of lower facial muscles of left side, of left leg and arm, latter rigid, answered questions put to him distinctly.

14th.—Constantly moving his sound side and rolling over to left, face covered with perspiration, flushed, very imperfectly conscious, talking a great deal, passing urine involuntarily, urine highly albuminous, radials not rigid, temperature 100·6°, pulse 134. Morph. Acit. subcute, with temporary benefit.

18th.—Morphia given with temporary effect, right side had to be strapped to bed.

20th.—Much the same, temperature 99·2°.

21st—More quiet, seems more sensible, motions, &c., still passed in bed, urine slightly albuminous, temperature 98·2°.

22nd.—Answers questions but in a more listless way, left arm and leg quite blue and cold, will not keep himself covered. Has emaciated in a remarkable degreee.

24th.—In much the same condition, though not so wandering as at first.

25th.—Breathing got stertorous and patient died at 3 a.m.

P.M.—Hæmorrhage into right optic thalamus and lateral ventricle.

CEREBRAL HÆMORRHAGE—No. 3.

Æt. 48. Had two fits before at some time on morning of March 17th. Had a convulsive seizure while at work, and was admitted insensible with pupils greatly contracted; some signs of feeling when skin was pinched, urine highly albuminous. Breathing became very bad and he seemed in danger of suffocation. Pupils dilated gradually, conjunctiva insensible and pupils not reacting to light, sometimes twitching of lower extremities. Temperature 97·4°, pulse 64, respiration 24. Pulse at first hard and slow, but afterwards became very compressible. Breathing became worse, slower, and patient died at 5·30 the same day.

P.M.—Convolutions of right side flattened, clot filling right ventricle, left ventricle filled with blood stained serum with a clot in anterior part, gap 1½ inch wide between corpus striatum and optic thalamus of right side, septum lucidum entirely torn away, diamond shaped mass of clot in fourth ventricle, a clot in the centre of pons, apoplectic cyst in right corpus striatum. Lungs gorged with blood at the bases. Heart 18 ounces. Kidneys small and granular. Slight deposit of urate of soda in both toe joints.

INTERNAL STRANGULATION OF ILIUM—23.

Mary J., æt. 44, seized with pain in abdomen before going to work on April 10th, then at noon pain returned much more severely and continued in paroxysms till admission at 4 p.m. Collapse, tossing about with pain, vomiting what was taken, nothing abnormal to be felt in abdomen which was rather full, no hernia.

11th.—Vomiting only when food and medicine taken, still in pain and collapsed.

13th.—Not been sick since the day before, some prominence in right iliac region which was ecchymosed. Temperature 99·2°, Pulse 140. Evening, sinking.

P.M., general recent peritonitis. Seven feet or more of small intestine from cæcum upwards strangulated by twist in mesentery.

ANEURISM—RUPTURE INTO PERICARDIUM—20.

Æt. 70, a miserable old woman was seen to fall suddenly while walking in the street and brought here unconscious, cold, pulseless but not remarkably pale, died 5 minutes after removal to the ward.

Pericardium contained about 4 oz. of clot with some serum. First part of aorta very atheromatous and dilated, 1 in. above valves a horizontal rent 1½ in. long through greater thickness of artery which lead into a cavity lined with clot which was extravasated underneath the serous membrane covering the base of the aorta but no direct communication could be discovered with the pericardium. Left ventricle hypertrophied contracted, quite empty. Neither kidney had a true pelvis, the right ureter was dilated at its base and gave off the branches for the calices, the left ureter lead by a small hole into a large cyst containing more than half a pint of urine and which gave off three branches which entered the hilus of the kidney. Patches of the cortex of kidney were wasted. No syphilis in organs. The left kidney was in an early stage of hydronephrosis.

STEPHEN, 30—CHRONIC BRIGHT'S DISEASE—URÆMIC CONVULSIONS FOLLOWED BY MANIA.

Admitted March 29th. First had swelling oflegs and ankles in October last, a little before Christmas was very violent for 14 hours but has no recollection of it. 3 months ago eyesight was very bad, could not see above 20 yards

On admission, æt. 31, no dropsy, eyesight bad, pain in head, hard pulse, sphygmograph indicates high tension, urine s.g. 1010, abundance of albumen.

April 14th.—Headache and felt unwell all day. 10 p.m., hardly conscious and very restless, pupils dilated, pulse rapid and incompressible, nitrite of Amyl had little effect, only making the pulse more quiet and compressible.

15th.—2 a.m., had a fit. 2-30, venesection to a pint, an epileptiform seizure during the operation, 11, quite unconscious, nine fits since 2 a.m., temperature 102°, pulse 160, urine s.p. grain 1010, half albumen. 10-30 p.m., no more fits since 5 p.m.,—about 15 in all, temperature 100·4°, pulse 126; Croton oil ♏i. taken at 6 and bowels acted since.

16th.—Spoke sensibly, very sleepy, temperature 97·5°, pulse 78.

17th.—Not clear yet, passed his motions, &c., in bed. Evening, not at all sane, thinking he was going to be injured and threatened to throw things at the nurses and patients, 30 grains of Chloral given after which he slept.

18th.—Still looking strange, mind wandering, could not recollect coming into the Hospital nor tell where he was, fancied he saw all kinds of black figures; temperature 99°, pulse 82.

19th.—Temperature 98·4°, pulse 68, no more delusions.

CEREBRAL HÆMORRHAGE, GRANULAR KIDNEYS—24.

Æt. 58. Brought here at 4 p.m., on 14th April, unconscious, paralysis of right side with some rigidity of right arm, moving left side, left conjunctiva a very little sensitive, right not at all. Was sick frequently and steadily became more and more comatose, pupils contracted and immovable. 10·30, chest moving up and down with great rapidity, loud stertor, pulse rapid, temperature 102°.

15th.—3·30, temperature 104·3°. 8·30, died.

P.M.—Arteries of base atheromatous, convolutions on both sides flattened, some subarachnoid effusion of blood about the base and cerebellum. Both ventricles filled with blood partly clotted, corpus striatum, &c., of right side intact, structures forming lateral ventricle extensively torn up, remains of left corpus striatum pushed towards right side, a great chasm in base of ventricle reaching to 1 inch from anterior surface septum lucidum gone. Kidneys granular, heart 17 oz.

[We are indebted to Mr. J. M. Hobson for the above.]

REMOVAL OF A TUMOUR FROM A DOG.

Not long since whilst on a visit in Staffordshire I was called to see a small dog which was suffering from a growth on the side of the neck. The dog which weighed about 10lbs, was some 13 years old and the growth was nearly as large as an orange, very firm and springing from a flattened peduncle which allowed the tumour to touch the ground and consequently had caused an ulceration of the skin covering it. It was apparently painless to the touch, but seemed to cause discomfort by its weight. I decided to excise it at once, and having obtained some chloroform and instruments I set about its removal. The operation itself presented no great difficulties but I felt greatly in need of an able assistant, as the man-servant observing that my supply of anæsthetic was lamentably deficient, and having a wholesome respect for the dog's teeth, retired into obscurity very shortly. A large artery in the peduncle had been divided and thus unaided I was unable to secure it and was afraid lest the dog should bleed to death, in which case it is needless to remark that I should not have heard the last of it for some little time. However, at this crisis, two ladies who had previously expressed their horror at my brutality and who had declared their determination to keep well out of the way at the time of the operation—but who nevertheless by some accident (of course) were suddenly discovered within a few feet—stepped forward and gave me the most able assistance. The artery was promptly twisted, the wound brought together with catgut satures and the patient rapidly made a complete recovery. The microscope showed that the growth consisted of densely packed adenomatous tissue with some spindle cells.

EDWARD AMPHLETT.

Medical Cases.

TETANY.

C. F., æt. 6, always suffered from rickets, for the last two years has been wearing irons and splints, suffered from diarrhœa for 18 months.

February 26th and 27th.—Child woke up during the night in a fright and seemed light headed. On the morning of February 28th, child suddenly cried out with pain, at the same time his hands and feet were drawn up strongly and the fingers and toes flexed, child was not insensible, no change of color in his face or any froth from mouth, the contractions lasted until admission, February 29th.

On admission, child looks very healthy, though he has an anxious look about him, the fingers of both hands are closely adducted and flexed, the nails almost touching palms of hands, thumb strongly adducted, being hidden by fingers, the point of thumb is between index and middle fingers; the whole hand is in the form of a cone. Dorsum of hand much rounded, the skin being reddened and veins distended, pain is experienced on touching the metacarpo-phalangeal joints. The hand is turned inwards from the wrist and the fore-arm is semi-pronated.

The feet are in the same condition as the hands, with the heel slightly drawn up by tendo achillis.

The lower ends of radius and ulna are enlarged, the ribs headed the very rickety condition. The paroxysms were frequent on admission, but were relieved by rubbing from below upwards.

Child was unable to open his hands and the least attempt to do so caused pain. No rigidity of muscles of jaw, or any spasm about larynx. Ordered Pot. Bromid gr. 8 t.d.

March 1st.—The thumb of right hand was more strongly adducted, paroxysms had been very frequent during the night.

March 4th.—Child can move his fingers and toes without pain, paroxysms very much lessened. Went on improving and left the Hospital on the 12th able to walk with tolerable ease, though his rickety condition and the constant wearing of splints seemed to have weakened him.

SUPPURATIVE MENINGITIS.

Edward Wood.—Patient complained of severe frontal headache on going to bed, he had suffered pain in left side for some days. At 3·30 a.m. his friend went to call him and found him lying on the floor speechless, not from drink (has been a hard drinker), he had passed his motions and urine under him, and seemed in a good deal of pain. Was brought here at 11 a.m. next morning.

On admission, March 23rd.—When first seen he was able to answer yes and no to some questions put to him by the Junior House-Surgeon, but did not like to be bothered. He moved both his legs a little and one of his arms. Patient is very much bruised and seems to have been badly treated, as his arms and legs are much bruised; no injury to head. Patient has an anxious look as if in pain; is unable to speak. The right side of face is devoid of expression. Right Facial Paralysis. The right arm is much weakened, the muscles are rigid, and the fingers and forearm are flexed; pupils contracted, the left a little more than the right, both act well to light. The tongue cannot be protruded beyond the teeth. Has no difficulty in swallowing. Urine highly albuminous. Temperature 97·6°, pulse 66, respiration 30.

25th.—Breathing became stertorous, right pupil insensible to light, passes everything under him, puffing out of cheeks at each expiration, loud râles heard over chest, temperature 100·6°, pulse 120, respiration 40. Patient sank gradually, temperature running up to 103°; died at 2·45 a.m.

March 26th.—This case was diagnosed as one of cerebral hæmorrhage.

P.M.—Suppurative meningitis, sub-arachnoid, was found all over vertex and base of brain. The ventricles were filled with sero-purulent fluid. The membranes of cord were filled with pus, especially on posterior surface. Kidneys healthy. No evidence of any fracture or disease of bone to give rise to suppuration.

[We are indebted to Mr. A. G. Lacy for the above.]

DISLOCATION OF ALL THE FOUR PROXIMAL PHALANGES OF THE FINGERS BACKWARDS.

A middle aged man, stepping from a tram car, fell forwards on to the fingers of his extended hands, the car being in motion. He came immediately to the Surgery (Sunday, May 7th). The proximal phalanges of the fingers of the right hand were found all dislocated backward on the metacarpal bones, there was a "tear" all across the palm opposite to the metacarpo-phalangeal joints exposing the flexor tendons, and one of these had given way. The displaced bones were easily reduced.

PHTHISIS IN RELATION TO DIFFERENT OCCUPATIONS.

In 1,000 deaths, in each of the different occupations named, the following proportions are furnished by Mr. Lombard of deaths from phthisis:—With vegetable and mineral emanations, 176; with various dusts, 145; with sedentary life, 140; with hot and dry air, 138; with workshop life, 127; with stooping posture, 122; with sudden movements of the arms, 116; with muscular exercise and active life, 89; with exercise of the voice, 75; living in the open air, 73. Among the rich, 68 per 1,000; and among the poor, 233 per 1,000 die of phthisis.—*Student's Journal.*

In the Gazette of October 8th, 1875, a short account was given of a case of Paralysis Agitans under treatment in the Electrifying room. As Dr. Wilks has referred to this case in his lecture it may be well to give a further notice of the patient. He continued to improve after each application of the interrupted Galvanism, and on March the 3rd the following is reported: Patient has followed his employment, that of a plasterer, for the last three weeks. He works on the roof of a house ascending by ladders without inconvenience. He now can shave himself. He states that the first improvement noticed was a lessening of the headache, then the giddiness diminished and his walk became steadier. Next the noises in his head disappeared and his sight improved. It will be remembered that when this man first attended he was unable to dress himself and all his movements were accompanied with persistent trembling. He has not attended since March 3rd, being so far recovered that he had orders to come only if he got worse.

SAVORY & MOORE'S

(PATENT)

MEDICATED GELATINE PREPARATIONS,

COMPRISING THE

ROUND DISCS EOR OPHTHALMIC PURPOSES.

Which were originally introduced by this firm, and have now been in general use by the Profession in this country and abroad for nearly twenty years.

"Much smaller doses of medicaments such as Atropine, Eserine (Physostigmine), Sulphate of Zinc, Morphia, &c., suffice to produce a marked effect by this form of application than when drops are introduced."—*The Lancet.*

"The transparent Discs dissolve admirably in contact with the moistened conjunctivæ. Nothing can be imagined more practical."—ANNALE D'OCULISTIQUE (Belgium, June 30th, 1864).

These (*Round*) Discs are contained and supplied in small tubes and cases, holding nearly 100 Discs each, and have been pronounced by all the Members of the Profession who have employed them to be the best media for Ophthalmic applications, as the *corners* of the square preparations used for this purpose are apt to irritate the Eye of the patient.

NEW DISCS FOR HYPODERMIC INJECTION.

Prepared by SAVORY and MOORE, at the suggestion of Dr. A. ERNEST SANSOM—viz.,
Morphia, Atrophiæ Sulph., Strychnia, Apomorphia, Ergotine, Codeia, Caffeine, &c., &c.

These Discs may be carried fn the smallest-sized pocket-book, are soluble in a few drops of warm water and offer a *certain* and *immediate* means of securing hypodermic injections.

Their advantages over the ordinary solutions, are portability, accuracy of dosage, and prevention of waste, as they will keep good for any time; whilst in a few seconds they form a reliable injection, the whole series used in Hypodermic treatment occupying no appreciable space.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

MICROSCOPES AND APPARATUS OF EVERY DESCRIPTION.

GLASS SLIPS, COVERING GLASS, CLIPS, LABELS, OBJECT BOXES AND CABINETS, DROPPING TUBES, MOUNTING FLUIDS, &c., &c.

CLINICAL THERMOMETERS 7s. 6d. & 9s.

IN METAL CASES TO PROPEL AS PENCIL, 15*s.*

STANLEY, Optician,

13, RAILWAY APPROACH,

LONDON BRIDGE, S.E.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine, and Surgery.

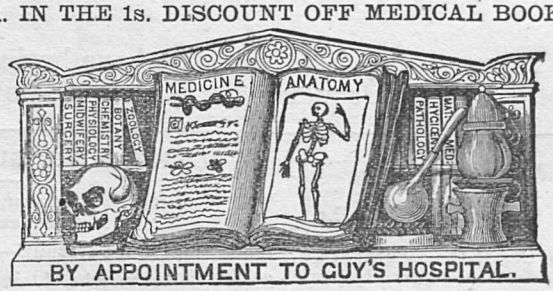
NEW SERIES.—No. 6. JUNE, 1876. SIXPENCE.

CONTENTS.

Clinical Medicine... 63
Clinical Lecture on Strangulated Inguinal Hernia ... 65
Leading Article 68
Electrifying Room 68
The Surgical Wards 69
Medical Cases 70
Complete Subcutaneous Rupture of the Trachea 71
Royal College of Surgeons... 71
Apothecaries Hall 71
Vivâ Voce 72
Eye Wards 72
Statistical Report... 72
Chloroform during Parturition... 73
Chronic Poisoning 73
On Duty for June... 74
Medical Examining Council 74
Guy's Athletic Sports... 74

3d. IN THE 1s. DISCOUNT OFF MEDICAL BOOKS.

NOTE BOOK FOR EXPERIMENTS IN ANALYTICAL CHEMISTRY, 2s.



NOW READY.

Mr. BRYANT'S NEW SURGERY,

2 VOLS., 19s.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

BOOKS BOUGHT OR TAKEN IN EXCHANGE.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

General News.

E. AMPHLETT, M.R.C.S.E., and R. SIMON have passed the final M.B. at Cambridge.

We understand that at a recent meeting of the Medical and Surgical Staff of the Hospital it was decided that the Introductory Lecture at the opening of the Session should be abandoned, and that in its place a Conversazione should be held at the Hospital on the 1st of October in each year.

Mr. W. H. A. JACOBSON, M.B., F.R.C.S., has been appointed Assistant-Surgeon to the Hospital.

Mr. SYDNEY HOWARD VINES, B.A., who was first in the Natural Science, Tripos, 1875, has been elected a Fellow of Christ's College, Cambridge.

TERMS OF SUBSCRIPTION.

The "Gazette" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to ST. CLAIR SHADWELL, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Medicine.

BY FREDERICK TAYLOR, M.D.

Tubercular Meningitis is by no means a rare disease: each student may not see a great number of cases, but in the practice of a large hospital, they occur sufficiently often. To speak of recent cases only, one was examined on the same day as the subject of this lecture, one is just now dead in Stephen Ward, and a fourth died in February of the same disease. It must be remembered that it occurs at all ages, from 6 months to 50 years or later; it is not peculiar to children, though the majority of cases take place in children and young adults. It may be the only disease present in any particular case; it may occur in association with disease of the lungs and viscera, as part of a general tuberculosis; or it may be distinctly secondary to such complaints, as the following:—(1) Phthisis; this is a very frequent occurrence in adults. (2) Different forms of scrofulous or tubercular inflammation, including (*a*) pyeronephritis, or scrofulous kidney; (*b*) caries of the spine; (*c*) tubercular tumour of the brain or cerebellum. This last is not unfrequent in children.

The changes in the brain which are especially indicative of tubercular meningitis are, the formation of lymph under the arachnoid membrane, the presence of tubercles, effusion of fluid into the ventricles, and softening of cerebral tissue.

1.—*Lymph* is found mostly in three situations, namely, in the diamond shaped space at the base of the brain, and about the optic chiasma; secondly, in the sylvian fissures; and thirdly, at the anterior part of the upper surface of the cerebellum in the middle line.

2.—*Tubercles* are most readily seen in the sylvian fissure, but where not abundant may be searched for by stripping off a portion of pia mater and looking for opaque spots between the vessels; or by tearing away some of the smaller vessels, floating them in a little water and then examining with a lens, when the tubercle will be seen as minute granules or nodules on the finest arterioles. Under a higher power of the microscope the granule is seen to be due to an accumulation of lymphoid corpuscles in the outer portion of the vessel wall (perivascular sheath).

3.—*Fluid effusion* is variable in quantity.

4.—*Softening* is especially noticeable in parts in contact with fluid, and in other parts is probably the cause of some of the paralyses observed in tubercular meningitis.

Wm. H., æt. 10, of 83, George Row, Dockhead, was admitted May 1st, 1876.

Family history, fairly good.

He has never been strong or very healthy. Lately he has been playing with children just recovered from typhoid fever. Thirteen days before admission he was tired, languid, and suffered from diarrhœa, with brown, watery motions, passed sometimes three or four times in an hour. Seven days later he complained of pains in the head, back and chest, frequently picked his nose and fingers, felt sick, cold, and occasionally shivered. He had slept well up to this time, but four days later the purging stopped, and he began to be restless at night, starting in his sleep, and twitching the muscles of his face and mouth, frequently he got up saying he could not sleep. The next day he was very sick, with alternate flushing and pallor of the face.

On admission.—Is somewhat pale and anæmic looking. He lies in a comfortable position, but appears rather drowsy, with partially closed eyes, pupils dilated and equal. On the lips are lines of sordes. Tongue, clean, moist, and perhaps rather redder than natural, fungiform papillæ prominent. Uvula, elongated. Has a slight cough. Skin, moist in the flexures. Chest, normal. Heart sounds, natural but intermittent; the apex beats outside the nipple. Pulse, intermittent, 72. Respiration, 24, shallow and irregular. Temperature, 101·3°. Abdomen, tender in the right iliac region, where moderate pressure produces gurgling.

May 2nd.—Is sick, complaining and fretful. Has pain in the head and ears, as well as tenderness over the chest and over the whole abdomen, but there are no rose spots. Ordered ℞ Syr. Limonis ʒ ss. Mist. Ammon. Acet ʒ ss. statim et rep. 4 tis horis. ℞ Enema Aquæ Calidæ ʒ vi. statim.

May 3rd.—Abdomen and chest, tender. Bowels not open. Is very drowsy, lying on his back with the knees drawn up. In the afternoon, more restless, with tenderness of both ears, especially the left. In the evening, complained of pains in the back of his head. Adde sing. dos. ʒ j. Mist. Liq. Morphiæ ♏ v.

May 4th.—Was sick at 2 a.m. this morning. Dark ring round the eyes; pain in the loins and back of the head. In the evening, "Tache Cerebrale" marked.

5th.—Lies in the same position as yesterday, Still drowsy. The abdomen is retracted, but not tender. Bowels not yet open. In the evening is restless, not quite conscious. Ordered ℞ Enema Simplex. ℞ Pot. Bromidi gr. v. Aq. Camph. ʒ j. 4 tis horis.

6th.—Patient's bowels have not yet acted, though he had several enemata during yesterday, The right eye is partially closed and the pupil dilated. At 2 p.m., the optic discs were examined by Dr. TAYLOR and found to be congested. He has frequent jactitation. At 4 p.m., is still unconscious, and though quieter, is grating his teeth. Does not appear to be able to close the eye. Ordered ℞ Enema Ol. Ricini. Rep. Enema. ℞ Mist. Vini. Gallici. Ice to be applied to the head.

7th.—Had a screaming fit in the night lasting half an hour; was quieter after, and somewhat more conscious during the day, Limbs twitching slightly. Bowels not yet open and abdomen still sunken.

8th.—Appears sensible, and answers questions quite rationally; says the back of his head and his back ache. "Tache Cerebrale" not so marked. The dark

ring round the eyes had disappeared; cannot entirely close the right eye. Dr. TAYLOR made an examination of it with the ophthalmoscope, and found the margin of the disc was visible, the disc itself being dark reddish purple, veins tortuous and full. Moist râles heard at the bases of both lungs.

9th.—Slept but little last night. About 6 a.m., became quite unconscious, picked at the bedclothes, and screamed for about half an hour; he then became quieter, and has remained partially unconscious since. About 3·30 p.m., the bowels were moved. At 4 p.m., he was more comatose, lying quite quiet. The right pupil is dilated, and the conjunctiva insensible. The surface of the body cool, and the extremities livid. Moist sounds were heard at both bases posteriorly. At 5·55 p.m., without further paralysis or spasm, death took place.

At the autopsy.—Much gelatinous lymph at the base of the brain; the membranes everywhere firmly adherent to the brain substance, which tore when their separation was attempted. There were distinct tubercles in the membranes, especially along the sylvian arteries.

Brain.—47 ounces; much flattened on the surface, the ventricles containing 4 ounces of tinted fluid. Ependyma granular; central parts softened.

Spinal cord.—Lymph on posterior surface of dura mater, which was very opaque, granular on its inner surface, and distinctly adherent to the visceral arachnoid.

Lungs.—No miliary tubercles, much pus in the bronchial tubes at the lower parts.

Heart, spleen, kidneys, intestines and liver, healthy; the last weighing 40 ounces.

In the mediastinal glands was a large caseous nidos, and of the mesentery glands, one or two in the portal fissure were affected with much partial disease, caseating in fine granules, which were said to be distinctly tubercular, though the process was only just commencing, the capsuled part looking of a dark greenish-white.

The prominent features in the clinical history of the case were headache, sickness, fever, paralysis, convulsions and coma, terminating in death within nineteen days of the first appearance of well marked symptoms. Though there are many other points to which attention will be directed as aiding or establishing the diagnosis, still the above are the symptoms which in various combinations will be found in nearly all cases of the disease. The following selection from a number of cases will show the variety that may occur:—First case. Headache, fever, delirium and coma; duration, six days. Second case. Fever, fits, and coma; duration, eleven days. Third case. Headache, fever, sickness, paralysis and coma; duration, twelve days. Fourth case. One fit at commencement, stupidity, headache, drowsiness and coma; duration, forty seven days. A few remarks on these symptoms before proceeding further.

Headache is commonly an early symptom and is mostly very intense, causing the patient to cry out, scream, moan, or to hold the hand constantly to the head. It is frequently associated with pain at the back of the neck. It must be remembered that in typhoid fever, with which tubercular meningitis is often confounded, headache may be also very severe.

Paralysis is very variable in duration, extent, and degree. Sometimes one cranial nerve alone is affected; it may be the third, the sixth, or the portio-dura of the seventh. On the other hand, one arm or leg may be paralysed, or complete hemiplegia may occur, accompanied by the peculiar condition which is often added in severe lesions of the central ganglia, namely, deviation of the eyeballs, and rotation of the head from the paralysed side.

Convulsions occur, as one epileptiform fit at the commencement of the illness, or as one or two within 24 hours of death, or as a series throughout the illness; it may express itself only in the form of twitching, or as a persistent rigidity of the limbs.

Coma developes sooner or later, generally shortly after passing through the stages of stupidity and drowsiness.

Of the other elements in the diagnosis to which allusion has been made, some deserve more than a mere mention. They are mostly observed later in the disease, and serve to confirm an opinion formed from other data.

In infants the fontanalle may be elevated and tense; and this condition has been laid stress on as a means of diagnosis between the coma of meningitis and that due to exhaustion from marasmus. Nevertheless, a child may certainly die of meningitis with a depressed fontanalle.

On the side of the alimentary canal, *constipation* and *retracted abdomen* are usually observed. The former is frequently obstinate, especially towards the end of the disease; but diarrhœa is not impossible, and its occurrence in the present case, in conjunction with the fact that children from the neighbourhood had had typhoid, caused some delay in the diagnosis. Co-existent abdominal disease may hinder retraction, and death may take place with the flatulent distension still present.

Irregularity of the pulse and respiration are important signs. A peculiar form of irregular respiration, in which a regular alternation of quick and slow breathing takes place, has been described in tubercular meningitis; but Dr. TAYLOR has only once in a great number of cases seen any approach to it.

"Tâche Cérébrale," or cerebral streak, is the name given to the exaggerated red mark, due to vaso-motor paralysis, which appears after rubbing or stroking the skin of the patient. Something of the kind appears in health; it is more marked in fevers, but in meningitis it is more readily produced by a lighter touch, is brighter, broader, and lasts longer.

Optic neuritis has been stated to be a constant occurrence in this disease. In the present case well marked optic congestion was observed within a day or two of death, though it was not present three days after admission. In many other cases which Dr. TAYLOR has examined he has failed to observe it.

Clinical Lecture

ON STRANGULATED INGUINAL HERNIA.

By R. CLEMENT LUCAS, B.S., JUNE 3rd, 1876.

I have chosen the subject of Strangulated Inguinal Hernia from having had lately under my care three cases of gradually increasing severity. In the first it was possible to reduce the hernia by manipulation or taxis. In the second the hernia could not be thus reduced, and an operation was required. In the third the symptoms had been overlooked, the intestine was gangrenous, and though opening the bowel gave relief, the patient ultimately died from peritonitis.

A hernia is the protrusion of a viscus from the cavity in which it is normally contained, an abdominal hernia the protrusion of any viscus from the abdominal cavity, this occuring most commonly at the inguinal and femoral canals, or umbilicus.

A few words to remind you of the anatomy of inguinal and femoral hernia.

In inguinal hernia you have—In front, the aponeurosis of the external oblique, and in front of the external third of the inguinal canal the internal oblique muscle; also behind, the conjoined tendon of the internal oblique and transversalis muscles and transversalis fascia. Above, the arched fibres of the internal oblique and transversalis muscles. Below, the union of the fascia transversalis with Poupart's ligament.

In femoral Hernia, in which the hernia at first passes through the crural ring beneath Poupart's ligament, on the inner side of the femoral vein and on the outer side of Gimbernat's ligament, then enters the crural canal and finally emerges through the saphenous opening, you have the protruded part passing through a *fibrous* and not through a *muscular* canal, as in inguinal hernia. This anatomical difference I would particularly enforce upon you, as it will influence to some extent our treatment in the two forms of hernia.

To distinguish inguinal from femoral hernia the following points are important.

INGUINAL HERNIA.

1.—Comes down through the inguinal canal "above" Poupart's ligament, its course being downwards and inwards.

2.—Nearer the middle line, and passes into the scrotum in the male or labium in the female.

3.—The spine of the pubes is on its outer side, and generally overlapped by the tumour.

4.—The finger cannot be passed up through the external abdominal ring into the inguinal canal.

5.—Tumour generally large and elongated.

FEMORAL HERNIA.

1.—Comes down through the crural canal "below" Poupart's ligament, and though afterwards passing upwards and outwards above Poupart's ligament, can always be drawn down below it.

2.—More removed from the middle line and passes into the thigh.

3.—The spine of the Pubes is on its inner side, and can be distinctly felt.

4.—The finger can be passed up through the external abdominal ring into the inguinal canal, and the canal felt to be free.

5.—The tumour is usually small and rounded.

The first case is the following:—

J. L., æt. 34, married, a leather dresser by trade.

Has two brothers ruptured on the same (right) side. A swelling was first noticed in the right groin about six years ago. At first small, it gradually increased in size, but was always easily reduced, and before his present attack it was never larger than an egg. He has never worn a truss.

Present attack.—On April 1st, he was at work as usual; and, at about 4 p.m., was lifting some heavy skins, when the hernia came down larger than ever before, and caused great pain. He went to bed at once, and tried to push it back, but failed. Two hours later he vomited. The doctor being sent for, endeavoured in vain to reduce it, and the patient was brought to Guy's Hospital at 11 p.m.—that is, seven hours after the bowel first came down—having vomited frequently.

On his arrival, a swelling, of about the size of a fist, was found to exist in the right groin, and it extended into the scrotum to the top of the testicle, but apparently did not occupy the tunica vaginalis. The tumour was very tender, tense, and devoid of impulse. Taxis could not be applied with effect, on account of the tenderness. He was ordered a hot bath, and Tinct. Opii ℥xxx.

About an hour later, Taxis was again applied ineffectually.

Chloroform was now proposed, and, if necessary, an operation. Patient would not submit to this until he had seen his friends; and, whilst they were being communicated with, the pelvis was raised and an ice-bag applied to the tumour.

At 2 a.m. his friends arrived. Chloroform was then given, and, upon pressure being applied to the tumour, a slight gurgling noise was heard, followed by reduction of the posterior part of the loop; the rest of the hernia followed with a loud gurgle, and two days later the man was discharged cured.

A few points may be noticed with respect to this case:—

1.—Two brothers were ruptured on the same side, showing some family weakness of the parts on that side. Mr. KINGDON found that in 34 per cent. of herniæ there was an hereditary predisposition.

2.—Age. A hernia occurring before the age of 20, is probably inguinal or umbilical; the congenital form of inguinal hernia, in which the vaginal tubular process of the peritoneum preceding the descent of the testicle has not been closed, being the most common. This kind of hernia is distinguished by its sudden formation and by its passing at once into the scrotum. In the case considered, the tumour was at first very small and

gradually increased in size, taking six years to become as large as an egg. The man was 28 years of age before it began to appear, and the testicle could be felt distinct from the tumour; it was therefore an "acquired," and not a "congenital," hernia. I shall presently point out to you that, in the two other cases, the hernia protruded into a congenital hernial sac.

Let us now consider the reasons for believing the swelling to be a hernia. There was a history of its having been reduced. The following reducible tumours may be met with in the groin:—

1.—Below Poupart's ligament, a psoas abscess; but this, though it would give an impulse on coughing, and diminish when the patient lies down, fluctuates, and is associated with disease of the spine.

Varix of the saphena vein also gives an impulse on coughing, and diminishes when the patient lies down; but, if pressure is made below Poupart's ligament, the swelling quickly reappears, whereas, under such circumstances, a hernia would not come down.

2.—Above Poupart's ligament and extending into the scrotum.

Varicose enlargement of the spermatic veins is distinguished by its feeling like a bundle of distended veins, or a "bag of worms."

Congenital hydrocele is rare, except in infants, but if present may be distinguished by its transparency and fluctuation. Any person with an open vaginal process of peritoneum becoming the subject of dropsy would get a congenital hydrocele, and the ascitic fluid might be drawn off from the scrotum.

All these tumours diminish or disappear when a patient lies down, but reappear when he assumes an erect position. I know of no tumour in this position, except a hernia, which, when reduced, *will remain so* whilst the patient is erect, and come down again on exertion.

Why was the hernia strangulated? 1.—It was larger than it ever had been before. 2.—Two hours after descent vomiting occurred, this also pointing to strangulation. 3.—On coughing there was no impulse, this indicating that the communication with the abdomen had been cut off.

To consider the value of certain symptoms as indicating strangulation:—

1.—Vomiting is perhaps the most important. It is persistent, the vomited matters consisting first of the contents of the stomach, becoming next of a greenish colour from admixture with bile, and then of the contents of the small intestine, gradually becoming fæculent or stercoraceous.

2.—Constipation is of value only after a day's interval, for the large intestines may empty themselves at the onset of the symptoms, and one or two motions may be passed after strangulation has occurred from the bowel being emptied below the strangulation. In cases of long standing it is of importance, enabling us to distinguish between the vomiting caused by strangulated omentum and that caused by constricted bowel.

3.—The hernial tumour was irreducible and devoid of impulse on coughing.

You must not forget that a hernial tumour is an essential part of the symptoms. Persistent vomiting and constipation point to intestinal obstruction, which may be situated within the abdominal cavity if no tumour be present. In every case of persistent vomiting it is your duty to examine for a hernial tumour.

These are the three signs by which you diagnose a strangulated hernia:—an irreducible hernial tumour devoid of impulse, persistent vomiting and constipation. To complete the picture, cross the arms upon the abdomen to ease the abdominal pain, blanch and hollow out the cheeks, throw a deep areola round the eye, give a pinched and anxious expression to the face, and you have the general appearance of a patient suffering from abdominal agony. The pulse is slightly increased, the skin moist, and the temperature rarely much above normal.

Treatment. 1.—The hot bath should be tried in cases of irreducible inguinal hernia, any spasmodic action of the abdominal muscles being thereby relaxed. In femoral hernia, the canal being fibrous and not muscular, the bath is of little service, though in both cases it has the effect of reducing nervous irritability.

2.—Opium checks vomiting, eases pain, and allays muscular spasm. If taxis should prove unsuccessful, after these means have been tried—

3.—Chloroform should be given, after getting the consent of the patient to be operated upon, if the hernia cannot be then reduced. In the above case the patient wished first to consult his friends, and, during the interval employed in sending to his friends, the pelvis was raised, that gravity might tend to bring the tumour away from the canal; the thighs were semiflexed to relax the parts; the scrotum was raised to prevent venous congestion at that part and favour gravity; ice was applied to act on the unstriated muscular fibres of the vessels and of the intestine, inducing them to contract. The patient having at last consented, chloroform was given, and the bowel was reduced by compressing the sac, the posterior part of the loop going back first, this falling into the pelvis when reduced, whereas if the anterior part be first reduced it is more likely to slip out again.

You may have read of cases in which *inversion* of the patient's body and *inflation* per rectum have been used as aids to taxis. The former method calls upon the force of gravity to assist in dragging the intestine out of the canal, the latter by dilating the intestine below is presumed to aid in pulling out the strictured part. I have described to you how to place the patient that gravity may act whilst ice is applied, and the principle is a sound one. But inflation, though most useful in cases of intussusception, inasmuch as it dilates the stricturing part at the same time that it

tends to push out the part strictured, cannot, I think, tend much to reduce a hernia; and when I read of cases in which one person holds up the patient by the heels, whilst another blows up his rectum, and a third kneads his hernia, I am inclined to think that this display of excessive energy is prompted by a feeling of timidity—that there is a desire to escape from the responsibility of doing the right thing, viz., to attempt reduction under an anæsthetic and failing, to operate. Remember that the danger in strangulated hernia is in delay and injury done by forcible taxis, not in the operation.

The second case to be considered is the following:—

C. M., æt. 22, a potman, was admitted March 10th, 1876. He had never had a hernia before.

On March 10th, at 7 p.m., he was making a slight exertion, when he felt the bowel come down into the scrotum; he was in great pain and unable to walk, was assisted upstairs and went to bed. The tumour constantly but gradually increased in size, and at about 8·20 p.m., he was brought to this Hospital.

There is no doubt that this was a hernia into a congenital sac. Its sudden appearance and large size, at the time I operated as large as my double fist, and the acute instantaneous pain, all indicated that the sac was previously prepared for it.

On admission.—Patient was found to be suffering from a strangulated inguinal hernia. Vomiting was frequent, and the pain was increasing in severity. Taxis, by the House-Surgeon, was unsuccessful, and ice was therefore applied and Pil. Opii gr. 1 given. No relief being obtained, and the pain increasing, and the scrotum becoming of larger size, at 10·30 p.m., taxis was again applied by the House-Surgeon, without success, and Pil. Opii gr. 1 again given.

At 1·30 a.m., as the vomiting continued and the pain increased, Mr. LUCAS was sent for, and an operation was performed.

An incision of about three inches in length was made over the long axis of the tumour, and, the coverings being divided, a constriction was found at the external abdominal ring. This was divided, but, the tumour being still irreducible, the sac was opened, five or six ounces of serous fluid being evacuated. A stricture was then divided at the internal abdominal ring, and the bowel could then be returned; sutures were inserted, and strapping and a bandage applied. An opium suppository was administered and Pil. Opii 4 tis horis ordered.

There was some difficulty in rousing him from the chloroform, and it should be remembered that, in cases where there is much collapse, or when much opium has been given before the operation, it is better not to give a suppository until the patient has recovered from the anæsthetic.

Patient then went on well until the fifth day after the operation, when he became restless and feverish, the tongue white, the pulse quick, and the temperature 101·8°. There was no abdominal tenderness or distension indicating peritonitis, and the scrotum was found to be inflamed. This pointed to suppuration of the sac, so the wound was opened with a probe.

The patient was placed in a slanting position that the pus might gravitate to the lower part of the scrotum, and not into the abdomen, and a firm pad was kept on the internal abdominal ring.

A few days later an abscess formed in the scrotum, the pus was let out by an incision at its lower part; the temperature then went down, and the patient gradually recovered, the bowels acting ten days after the operation, the wound healing up, and the patient left the Hospital about a six weeks after admission.

The third case is the following:—

D. E., æt. 17, glassblower.

Patient was a dark ill-conditioned lad, who stated that he had been ruptured ever since an attack of Scarlet Fever, eight or nine years ago. He had never worn a truss, the tumour being always reducible with a gurgle.

Present attack.—On March 1st, after supper he complained of pain and sickness which continued during the night, and the next day, as his bowels had not acted, his mother gave him 2d. of Jalap, and as this had no effect it was followed up by 1d. of Salts.

On the following day, the vomiting and constipation continuing, he was given 2d. of Castor Oil, and on the next day the Doctor was called in, and ordered a Saline Mixture.

On March 6th, he was brought to the Hospital.

On admission.—Patient was cold and collapsed, face pale and anxious, cheeks shrunken, hollow eyes, voice feeble and whispering, pulse small and thready. Patient was in great pain. The abdomen was distended, hard, and tender. His vomit dark colored and fæcal. The right side of the scrotum red, œdematous, and inflamed.

A hot bath was administered, though as the man was in a collapsed state and no muscles had to be relaxed, this could be of little service.

Mr. Lucas was sent for and Ether administered, which reduces a patient less than Chloroform, and an incision being made over the tumour the external abdominal ring was divided and then the cremaster, which was found to be about ¼ in. in thickness with a slough on its surface and even resembling the intestine. The sac was opened and a dark brown fluid having a fæcal odour escaped. The loop of bowel seen to be green, plac cid, flabby, without lustre or resiliency and evidently gangrenous were then opened, and the margins of the aperture were stitched to the sides of the wound. An enormous motion came away, swamping the bed, and probably including the Jalap, Salts, Castor Oil, and Saline Mixture, and this gave him mnch relief. Opium was then given, and milk and brandy ordered.

On March 6th.—The temperature rose to 100·8°, pulse 124. Ordered four eggs, brandy and milk.

March 7th.—Temperature 104·8°, pulse 112.

March 8th.—Temperature 101·4°, pulse 108. Scrotum diminishing in size.

March 9th.—More drowsy, and during the next few days the drowsiness increased, the eyes became more sunken, neither opening widely when he was awake nor shutting totally when he was asleep; these being bad signs in a serious illness. Temperature normal.

March 11th.—About six inches of intestine sloughed away, and in the evening patient complained much of hunger, and vomited. Tempe ature normal.

March 12th.—Patient was restless and complained of feeling cold. At 1·15 p.m., patient was sick, gr. ⅓ of Morphia was injected hypodermically, and at 3 p.m., he died somewhat suddenly.

P.M. Examination:—General Peritonitis was found, and the two ends of the bowel left after the gangrenous portion had separated were found in close contact and adherent to the margins of the wound.

This case speaks for itself, and shows the danger of delay, and the importance of recognizing a strangulated hernia at the onset. The patient, at the time of his admission, was suffering from general peritonitis and gangrenous intestine, and though much relief was afforded by establishing an artificial anus, he sank at the end of a week.

GUY'S HOSPITAL GAZETTE, *JUNE*, 1876.

POPULAR ignorance has always been opposed to the researches of Biological Science. Harvey's great discovery caused him to be looked upon with something more than suspicion, whilst Jenner was well nigh ruined as his reward for the means of annually saving some millions of lives; and now, in the 19th century, the lever of popular prejudices, set in motion by ignorance, is doing its best to crush the progress of Biology in *toto*, or at least to so hamper its prosecution that every experiment is beset by technicalities, and the world's teachers are brought under the supervision of, forsooth, the police! The very title of the Government Vivisection Bill is an insult to our profession, which by inference is accused of cruelty,—a body whose youngest votaries think nothing of spending many weary hours in such wretched hovels as only London can show, or give up hour after hour in such tedious work as the digital cure of an aneurism, we will say, *gratis*, but not even always for thanks. The Medical Council have with great care been deliberating upon this Bill, and though there was considerable disposition to take the issue upon the very necessity of the measure, we think they have done wisely in the course they have followed, and the series of careful amendments they have proposed cannot fail to have their due influence with the House of Commons, or at least if that body should insist upon pandering to popular prejudice in opposition to the highest scientific opinion obtainable, upon them will be the stigma of enforcing ignorance by Act of Parliament, or it may be the loss of the lives of hundreds of their countrymen.

The framers of the Act have gone far beyond the recommendation of the Royal Commission, in which, as we pointed out at the time, Biological Science was far from being fairly represented, and now we have their production before us. We think Government would have done well to entrust the framing of the measure to some such body as the Medical Council, for if they had done so they would have avoided many mistakes; what, for instance, could be more absurd than the consequences of the non-definition of an animal or the exempton of cats and dogs, for as the result of the former an experimentalist is equally as liable for dividing the insensitive polyp without an anæsthetic as he would for the most painful operation, whilst if our domestic carnivora are to be protected, where are we to find the necessary substitute? Under the act woorara is not allowed to be used, and we think well, but the Council have met it with a far more sensible clause which provides that no substance shall be used as an anæsthetic until it has been proved to be one, whilst the registration of all places of experiment must, if passed, entail as its necessary consequence, the limitation of all such observation. Finally, we ask our learned legislators if they should pass this *Bill for the prevention of Biological knowledge* in its present state, that the next time they run the fox to death, or wing the bird at Hurlingham, they will remember that the life they have destroyed—we will not say the pain they have caused—might have have been the means of saving human lives, it might be even their noble selves.

Electrifying Room.

REPORT ON CASES TREATED IN THE ELECTRIFYING ROOM, FROM 1864 TO 1875 INCLUSIVE.

By R. J. PYE-SMITH and J. H. SANDY.

(Continued from page 59.)

SCIATICA.—Of this affection 18 cases are reported. The average duration before treatment was four months, the extremes being three weeks and four years. The average length of treatment was two months, the extremes being two weeks and nine months. Galvanism was employed in 17 cases, of which 7 were cured, 8 improved and 2 not improved. The remaining case was treated first by Galvanism and afterwards by the Faradic bath and cured. This great success in the application of Galvanism is in accordance with the experience of most authorities.

FACIAL NEURALGIA.—Only 3 cases are reported. The duration was two months, two years and one year respectively. The period of treatment was in each case about a month. All were treated by Galvanism, 1 was cured, 1 improved and 1 not improved. ANSTIE speaks very highly of Galvanism, but on the whole it would seem to be somewhat less frequently efficacious in Facial Neuralgia than in Sciatica.

APHONIA.—All the cases reported (9 in number) occurred in young women. The average duration of the condition was six months, the extremes ten days and fourteen months. The treatment was continued on an average for ten days, the extremes being a single application and three weeks. 2 were

treated by Franklinism and neither of them improved, 1 was treated by Galvanism to the throat and cured; 1 by Galvanism to the spine and Faradism to the throat, and not improved; 5 by Faradism to the throat (either internally or externally applied), of which 4 were cured and 1 was improved. In most of the successful cases only one or two applications were needed, others have obtained good results with Franklinism as well as with the other forms of electricity.

AMAUROSIS.—18 cases are reported, but several of them not at all fully. All were cases of anœmia or atrophy of the optic nerves, but few if any seem to have been due to tobacco. All but five were men. The average duration of loss or impairment of sight was three years, the extremes one year and five years. The average period of treatment was two months, the extremes being two weeks and three months. All were treated by Galvanism (see British Medical Journal, May 18, 1872), 5 were improved, 12 not improved and 1 was made worse. In no case was the improvement very great. Authors have recorded a few cases successfully treated in the same way, and we have seen one or two cases elsewhere in which great improvement has seemed to be due to Galvanism.

DEAFNESS.—12 cases are reported. Most of them were cases of nerve deafness in which other means of improvement had failed. The average duration of deafness was six years, the extremes three months and twenty-five years. The treatment averaged one month, the extremes being two weeks and three months. 9 cases were treated by Galvanism; 2 were improved and 7 not improved. 3 were treated by Faradism; two were much improved (both of them supposed to be hysterical) and 1 was not improved. Other experiments seem to have met with no better success in similar cases.

AMENORRHŒA.—Since 1872, 6 case sare reported. The average duration was two years, the extremes one year and four years (in 2 cases menstruation had not commenced at the ages of twenty and twenty-three respectively). The average treatment lasted one month, the extremes being a single application and six weeks. 2 were treated by Galvanism through the pelvis, 1 was cured and 1 not improved. In 4 cases Faradism was applied in the same way, 2 were cured and 2 not improved. Before 1872, 8 other cases are reported. 3 were treated by Franklinism without improvement, and 5 with Faradism, under which 1 was cured, 1 improved and 3 were not improved.

In former times much better success followed the employment of Electricity. BIRD cured 20 out of 24 cases by shocks from the Leyden Jar passed through the pelvis, and GULL reported 13 others cured in the same way. (See Guy's Report for 1841 and 1853.)

HYSTERIA.—7 cases characterised by various erratic symptoms are reported. The average duration was three months, the extremes three weeks and four years. The duration of treatment is, with one exception, not stated. 2 were treated by Galvanism and both cured. 5 were treated by Faradism, 2 being cured (in 1 case by a single application), 2 improved and 1 not improved. Most authors seem to prefer Faradism in these cases—probably from its more obvious effects on the sensory nerves and on the muscles.

MISCELLANEOUS.—Among the rarer cases in which Electricity has been tried, the following are perhaps the most interesting:—*Mercurial tremor*, a case recovered under the application of Galvanism to the spine. *Dilated Stomach*, no contractions were produced by either Galvanism or Faradism. *Hydatid Cysts*, in 3 cases a Galvanic current was passed through and in 1 case a Faradic current without effect.* In the following cases the result was uncertain or unrecorded:—*Epilepsy, Sclerosis, Cerebro-Spinal, Meningitis, Exophthalmic Goitre, Bright's Disease, Addison's Disease, Acute Rheumatism, Lumbago, Talipes, Wryneck, Rickets, Suppression of Milk*, and *Dumbness*.

In addition to the above cases we may remind our readers of the use made of Electricity in the treatment of *Ulcers* (see Guy's Gazette for 1873) and, by means of the Cautery, in the treatment of *Nævus, Lupus, Epithelioma*, etc., as well as of its rarer application for the production of artificial respiration and for purposes of diagnosis or treatment in those brought into the Surgery in "fits," etc.

*These cases must not be confounded with those in which electrolysis was (successfully) employed.

(*To be concluded.*)

The Surgical Wards.

PNEUMOTHORAX—PARACENTESIS THORACIS—RELIEF.

A man having been admitted some time ago with mischief about the left ankle joint, developed threatening symptoms of delirium tremens, which however passed off. His temperature remained up to 101° to 102°, and his general condition was bad.

Suddenly on Sunday, May 28th, he was seized with dyspnoea and next day signs of Pneumothorax was present.

His dyspnoea increasing, his chest was tapped with a fine trocar and canula. The air rushed out with some force, extinguishing a match. The air was not offensive. Respiration fell from 48 to 27 in the minute, and he expressed himself as much better. Slight dyspnoea again came on about an hour later, he was turned over to the affected side and was immediately relieved.

Since the operation he has been comfortable, though suffering from fever and dyspnoea.

FRACTURE OF THE SKULL, HÆMORRHAGE INTO THE PONS—RAPID DEATH.

A man, 22, fell down and struck his head on the pavement.

On admission he was perfectly unconscious; pupils widely dilated; breathing stertorous; complete general paralysis. Respiration became irregular thus:—there were a few short respirations and then a long deep breath, followed by a long pause. This occurred frequently. The pulse rose to 188 in the minute and was for some time above 160. The temperature rose to 101°. He remained in this state for an hour and three quarters, when respiration suddenly ceased, the heart continuing for some time.

At the P.M., there was a fracture of the skull running into the Tympanum and forwards through the middle fossa. The Tempero-Sphenoidal lobe on the opposite side was pressed on the surface, and much blood was present on the injured brain. There was also effusion into the Pons and a small clot in the fourth Ventricle.

In a case admitted some time ago exactly the same injuries were found Post-mortem, with the exception of the effusion into the Pons. This man, however, lived several days, and had gradually increasing paralysis, with the symptoms of Meningitis (evidence of which was found at the base of the brain, quite unconnected with the brain injuries).

There have been 33 major operations during the month.

The elbow joint has been excised five times; the knee twice. Twice the arm has been amputated for disease of the elbow, and once the thigh for disease of the knee. The hip joint has been twice excised, and the shoulder once. Chopart's operation has been performed twice, Pirogoff's once, and Syme's once. Lithotomy was performed in a man aged 52. The penis was amputated for epithelioma by the electric cautery. There was one amputation through the forearm for disease of the carpus, and one through the condyles of the femur for epithe-

lioma of the leg. Herniotomy has been twice performed. The sac was not opened in one, and in the other after reduction by Taxis the sac was opened simply to explore.

Only one of these 33 cases has died. This was the case of removal of the Superior Maxilla for cancer, which was found to extend into the base of the brain. All the other cases are doing well, and some have quite recovered.

Medical Cases.

Margaret Beast, æt. 27, married, has two children alive, one died of convulsions. Had one miscarriage. As a child had measles and whooping cough. When she was five years old she had scarlet fever. As she was getting better of this she caught cold, which brought on convulsions; these left her left arm and leg paralysed. Since, she has never been strong, but never laid up. Menstruated first at 15 years. 14 months ago began to ail with shortness of breath, cough, weakness, and loss of appetite.

Was admitted into Guy's February 16th, 1876.

On admission.—She is a delicate looking woman, rather pale, left arm shorter and less developed than the right, the muscles are flabby, sensation not impaired, the arm cannot be straightened at the elbow, the hands and fingers are flexed at the wrist, the patient cannot straighten them herself, they can be straightened, but immediately afterwards resume the flexed condition.

Measurements.—Left arm:—(1) from acromion to outer condyle, 11 inches; (2) from condyle to styloid process of ulna, 8 inches; (3) from styloid process to tip of third finger, 6¼ inches. Right arm:—(1) 11½ inches; (2) 8½ inches; (3) 6⅜ inches. Circumference of middle of left arm (1), 5⅞ inches; of forearm just below elbow (2) 6¼ inches. Right arm (1) 6½ inches; (2) 7½ inches. The fingers are in a constant state of movement. She walks lame. The legs are much wasted, there is slight reflex action on pinching them. She has well marked symptoms of advanced phthisis at left apex. Right apex affected, but not in such a marked degree.

March 8th.—Electrical test.—Neither faradization nor galvanism appear to have any effect upon the contraction of the arm (current being applied as strong as patient could bear); *sensation to current unimpaired. Leg reacts fairly to faradization*, not to galvanism; sensation to current slightly less than arm. Patient died March 17th, 1876.

P.M., made 23 hours after death.—Body very anæmic and much wasted.

Brain, 41 ounces.—The *right* half of the cerebrum was very much wasted and very markedly smaller than the left, being shorter antero-posteriorly and less wide laterally. The *left* half of the cerebellum was similarly affected. When the lateral ventricles were opened there was found on the outer half of the right corpus striatum a greyish coloured patch about the size of a shilling, which on further examination was found to be the roof of a cavity of bluish grey colour, filled with fluid and large blood-vessels. The right corpus striatum posteriorly and the optic thalamus were wasted. That portion of the brain which forms the roof of the descending lateral cornu of the right side was much wasted.

Spinal cord.—The grey matter generally, but more especially in the cervical region, was of a pale colour, the mass of the left side being paler than that of the right. To the naked eye there seemed to be no other change in the cord. The brachial plexus (left) was taken away to be examined microscopically.

Lungs.—The *left* lung was very much hollowed out, tubercle being deposited in the whole of it. The base was consolidated and slightly pneumonic. Old adhesion of pleura. *Right*:—Signs of recent pleurisy. The disease was limited very markedly to the upper lobe, the lower lobe being fairly healthy. Bronchial glands enlarged. The right side of the heart was loaded with blood. Liver fatty.

Stomach mammillated. Small round tuberculous deposits in small intestines. A single ulcer in large intestine. Kidneys fairly healthy, 9½ ounces.

[We are indebted to Mr. C. K. Shaw for the above.]

FATAL CASE OF NERVE DISEASE (EPILEPTIC?)—NO ORGANIC LESION DISCOVERED.

C.B., A policeman, æt 22. He was employed at the desk writing on the morning of April 13th, and was not out of health, though he felt the right hand numb. He went on with his writing till 6 p.m. when there occurred some spasmodic contraction of the facial muscles and his hand was stretched out. About 7 p.m. he was heard to fall and picked up insensible, and was continually throwing his limbs about; was carried into the fresh air and presently recovered. He then walked back to the mess-room and about twenty minutes later while sitting would have fallen again if he had not been caught in time, but he had become unconscious a second time and remained so till admission into the Hospital next morning. He vomited two hours after the second seizure.

On admission.—He lay on his back apparently unconscious, face flushed, no paralysis anywhere, no impairment of sensation, but on the contrary, the least effort of restraint by others produced movements of an antagonistic nature; *e.g.*, if one tried to count his pulse or look at his pupils he would draw away his arm or his head. Bladder distended, pupils rather dilated—equal, pulse 96 regular, temperature, 100°2, respiration 36. Tongue furred, dry, brown, no vomiting, liver and spleen dulness not increased, chest sounds normal, urine normal. 9·30, temperature 101°.

15th, 10 a.m., temperature 98·9° Very restless when touched. 10 p.m., temperature 99·7°, passed water voluntarily, semi-conscious.

16th, 10 a.m., temperature 99·4° Quite conscious, but unable to give any account of his attack, or to remember when he was last on duty.

17th, 8·30 a.m., temperature 98·0° Appeared on the mend when last seen. At 6-15 a.m., he got out of bed and presently began "shivering," as nurse called it, then extremities became rigid and quivering, though the face did not twitch *was very pale at the time. From the time they got him into* bed again till 8·30 a.m., he remained unconscious, when seen at that time the breathing was stertorous, conjunctivæ sensitive, pupils dilated but responded to light, fingers and arms flexed and stiff, legs extended and stiff, quivering at times of all the limbs, facial muscles quiet. 10·30 a.m., temperature 100·7°, pulse 96, respiration 24. *Pupils dilated* not responsive to light. While being examined he became suddenly livid and stopped breathing; artificial respiration performed and the natural respiration partly restored, but it remained very bad indeed, the tongue requiring to be drawn forward. From this time till the evening he remained in a very precarious condition, the respiration being so badly performed. 12 p.m., temperature 103·2°, the note states: "frequently respiration gets slow and face livid," at one time twelve very irregular respirations occurred in a minute, some deep, some shallow in the extreme. Arms occasionally quite rigid but none of the restless movements as formerly. 2 p.m., temperature 104·4°, pulse 120, pupils constantly dilating and contracting, when pupils dilated he got very livid and the breathing shallow and irregular. 3 p.m., temperature 104·1°. 4 p.m., temperature 103·4°, contraction of the flexor muscles of the forearm, still breathing very badly. 9 p.m., temperature 101·7°, breathing better, rather less unconscious.

18th, 2 a.m., temperature 99·3°. 10 a.m., temperature 100·3°, pulse 100 (reg.), respiration 24; somewhat conscious. 3 p.m., temperature 100·6°, fairly sensible. 9-30 p.m., temperature 99·4°, pulse 120, respiration 22.

19th, 2·30 a.m., temperature 98·7°. 10·30 a.m., temperature 103·3°, pulse 120, respiration 23; answered some questions rationally but soon rambled. 2·30 p.m., temperature 102·2°. 10·20, temperature 100·8°, pulse 132, respiration 28; in same condition as in the morning.

20th, 1·30 a.m., temperature 99·8°. 11 a.m., temperature 97·6°, pulse 110, respiration 20; rather restless though some sleep was obtained in the night, complaining of frontal headache. Did not reply quite lucidly when questioned. 9·30 p.m., temperature 99·2°, pulse 118, respiration 25.

21st, 2 a.m., Morph. Acet. gr. ⅛ subcute. 5·30 a.m., had been sleeping from 2 till 5; he was then sick; now had an epileptiform attack, became livid and had general twitching. 5·45 a.m., still in an unconscious state, pupils contracted, limbs placid, moved right arm a little when left conjunctiva was touched. 6 a.m., temperature 97·8°, pulse 108; becoming more conscious. 11 a.m., temperature 100·6°, pulse 100; became gradually less conscious, livid and breathing hurriedly, now in a profuse sweat, eyes in constant motion, frequent general tremors—quite shaking the bed—limbs otherwise quite placid, inclination of eyes and head to right side. 11·30 a.m., temperature 106·8°, respiration 64; 11·45, temperature 106·8°, in same state, position not altered for last hour. 12·50 p.m., temperature 107·9°; more livid, hands and arms especially bathed in perspiration, skin of fingers quite soddened and sheets soaked where in contact, respiration 64 per minute—frequently suspended for about 30 seconds and then a deep inspiration; Nitrite of Amyl tried with no effect, general tremors constantly recurring and lasting from ½ minute to 1½ minute. 1·40 p.m., temperature 108°; died.

22nd, Autopsy—result, nil.

[We are indebted to Mr. T. K. Judson for the above.]

COMPLETE SUBCUTANEOUS RUPTURE OF THE TRACHEA.

A man about 47, while cleaning the outside of a steamer near London Bridge, was crushed between a barge and the side of the vessel. The projecting prow of the barge struck his neck and chin. *On admission*, he had some difficulty of breathing and on each expiration the neck was puffed out, shewing there was some wound to the larynx or trachea. The whole neck was emphysematous especially the left side. There was a fracture of the lower jaw between the left canine and lateral incisor. Hammond's wire splint was at once applied and a bandage over wet lint placed firmly round the neck. There was no urgent dyspnœa while in the erect position, the recumbent being impossible. The neck was too tender to allow of any close examination. He lived fifty hours, taking plenty of nourishment and easily expressing himself as much better. He died quietly, having just previously taken some milk from the nurse.

At the P. M., the trachea was found *completely severed* just below the thyroid body. The two ends were separated 1½ in., the lower being below the innominate vein. In the cellular tissue round the ends was much purulent material. There was no external bruise or wound. There was pus in the bronchial tubes. The inter-vertebral substance between the second and third cervical vertebra was torn through. All other organs were healthy.

ROYAL COLLEGE OF SURGEONS.

At the first examination for the Diploma of *Fellow* last month the following paper was set:—

1.—Describe the successive changes undergone by the Vascular System from its first appearance to the end of fœtal life.

2.—Describe the secretion of the Salivary Glands. State how this secretion is affected by nervous influence; and give proofs of each statement you make.

3.—Give the dissection required to expose the Internal Jugular Vein from its commencement to the level of the Hyoid bone. Describe the course and relations of this portion of the vessel; and mention the veins which terminate in it.

4.—Enumerate in their relative position the parts seen in a horizontal section of the trunk at the level of the third Costal Cartilage.

At the recent examination for the First Fellowship the following Gentlemen from Guy's were successful:—

Mr. J. C. Uhthoff, Mr. John Mackern, Mr. Wainwright, Mr. Lane.

And at the Examination for the Diploma of Fellowship, which was brought to a close on the 30th ult., Mr. T. D. Ransford, M.R.C.S., L.R.C.P., was admitted a Fellow of the College.

The following questions were given at the written Examination, all four of which it was necessary to answer:—

1.—Describe the chief features peculiar to all the varieties of the healing process in wounds of cartilage, nerve, muscle, and skin.

2.—To what causes may enlargement of the cervical lymphatic glands be due? Describe, in detail, the anatomical characters of the disease in each case.

3.—Give the pathology, diagnosis, and treatment of the various forms of pulsating tumour of the orbit.

4.—Describe the congenital malformations of the bladder and penis, and the modes of treatment adopted in each.

Professor Carter will commence his course of lectures on Questions in Opthalmic Surgery, on the 5th inst. The following is a copy of his programme, viz.:—Lecture 1 (June 5), On Opthalmology in its relation to General Surgery; Lecture 2 (June 7), On Glaucoma; Lecture 3 (June 9), On Iredectomy and its uses; Lecture 4 (June 12), On Iritis and Sympathic Ophthalmia; Lecture 5 (June 14), On Cataract Extraction; Lecture 6 (June 16), On Strabismus. The course of College lectures will be brought to a close by Professor Turner, who will deliver three lectures on the Comparative Anatomy of the Placenta.

APOTHECARIES HALL.

The following questions were asked at a recent Examination for the L.S.A.

SECOND HALL QUESTIONS.

Time 5 p.m., to 8·15 p.m.

MEDICINE.

1.—Describe the course, treatment, and complication of Measles.

2.—What are the symptoms of acute or chronic Alcoholism? What treatment is indicated?

3.—Mention the different varieties of Ague, together with the symptoms and treatment of each variety.

PATHOLOGY.

What is understood by lardaceous degeneration? Describe all the changes which are undergone in a liver affected with this disease.

THERAPEUTICS.

Write out all the remedies you know for Neuralgia, and give the doses of each.

MIDWIFERY, &c.

1.—What are the various causes of retention of the placenta? How would you treat each variety.

2.—What are the usual affections of the Mammary glands during lactation? Give your treatment for each.

3.—At what age and what part of the body would you vaccinate and why? Detail the steps of the operation, trace the changes which are undergone in the vaccine pustule until the falling off of the scab.

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

1.—What are the symptoms of poisoning by Opium? What would your treatment be? How would you test the contents of the stomach for Opium? Describe the post-mortem appearances.

2.—Describe the manner in which you would examine a man supposed to be of unsound mind.

3.—Are there any physical diseases which simulate rape? If so, describe them.

Two clinical cases to be examined. One Heart disease, the other Skin disease. A clinical history, diagnosis, prognosis, and treatment to be written about each.

VIVA VOCE.

PATHOLOGY TABLE.

Tell me all you know about inflammation. How do the white corpuscles get out of the capillaries? Do any of the red ones pass out as well? What is pus? What are the various pathological changes a pneumonic lung goes through? How may pneumonia terminate? A person has some consolidation about the apex of one of his lungs; what is you diagnosis? How should you expect the case to terminate? What is the nature of the fluid effused in pleurisy? What becomes of it? How do these cases recover? A patient's side is sometimes found to be sucked in; to what may this be due? What changes does the liver undergo in cirrhosis?

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

Here is a blood stained rag seven years old. How would you ascertain that the stains was blood? Give all the tests you know. How would you distinguish between the stains of paint, fruit, and blood? Tests shown with white lead, vermillion, and Scheele's green. What are they? How are these precipitates produced? What are the tests for each of them? How do you test for Arsenic? Detail in full the particulars of Marsh's test. How would you distinguish a solution containing Arsenic from one with Antimony?

MEDICINE TABLE.

How would you tell that a patient had an intermittant pulse? To what is it due? A person suddenly drops dead; to what causes may his death be due?

All known diseases of the Heart with their symptoms and pathology were then gone into.

What is the pathology of Acute Rheumatism? How would you diagnose the disease? What acid is supposed to exist in the blood during Acute Rheumatism? Is Lithic Acid also present? How would you try and eliminate the poison, if such you considered the treatment indicated? Would you use acids or alkalis and why? Write out a prescription for a diaphoretic. What is the active principal in Dover's Powder? Does the Opium act as a stimulant or a sedative? Would you give Acetate of Potash as a Diaphoretic?

MIDWIFERY AND DISEASES OF WOMEN.

You are at a labour, the parts are soft and the Os dilated to about the size of half-a-crown; suddenly there comes a gush of blood followed presently by another. Tell me what your diagnosis would be, and how you would proceed to act. Would the gushes come during the pains or between them? Why do you say so? Should you consider it necessary to turn? Should you put on the forceps? We will suppose the case has terminated to your satisfaction, you have left the house and presently, say in half-an-hour, are called to the woman whom you find *in articu'o mortis*; what would you expect? You find no blood in the bed nor on the patient's clothes, what would you then think and how would you act? What are the causes, symptoms, and treatment of Prolapsus Uteri? What do you know about the use of astringent hip baths in these cases? Supposing a lady unable to suckle her own child asks you to procure her a wet nurse, how would you set to work? When you had ascertained that she had no acquired syphilis, I suppose you would examine her teeth; what should you expect to find? What do you mean by Hutchinson's Teeth? What do the transverse lines sometimes seen on teeth signify?

MICROSCOPE TABLE.

Triple Phosphates. Oxalate of lime and Uric Acid Crystals, which is which, and how do you know? Trichinosis (about two Trichinœ one at each end of field) Disease of Kidney.

EYE WARDS.

During the month of April the following operations were performed:—Iridectomy, 35 times; operations for Strabismus, 18, for convergent, 16, and for divergent, 2; in 8 of the former both internal recti were divided, in the remaining 8, the 1 belonging to the squinting eye only; the 2 cases of divergent Strabismus were re-adjusted by divison of all the recti muscles (except the external of the squinting eye).

Extraction of Cataract, 9.
Needle operation for Cataract, 1.
Incision of opaque capsule, 1.
Excision ,, ,, 4.
Sclerotomy ,, ,, 3.
Removal of Conjunctival warts, 2.
,, ,, Sub-conjunctival lipoma, 1.
,, ,, Cysticercus under Conjunctiva, 1.
,, ,, Congenital Sebaceous cyst from orbit, 1.
Teale's operation for Symblepharon, 1.
Tinting corneal opacity, 1.

The anæsthetic "mixture" was administered 58 times with no ill result.

STATISTICAL REPORT FOR MARCH.

Number of women attended, 209; single births, 207; dual, 2;
Number of children born, 211; males alive, 98; males dead, 2; females alive, 99; females dead, 2.
Presentations: vertex, 208; breech, 2; funis and hand, 1.
Operations: forceps, 3; turning 1.

Women in 1st confinement,	38	Women in 2nd confinement,	21				
,, 3rd ,,	29	,, 4th ,,	27				
,, 5th ,,	23	,, 6th ,,	15				
,, 7th ,,	13	,, 8th ,,	11				
,, 9th ,,	15	,, 10th ,,	7				
,, 11th ,,	5	,, 12th ,,	1				
,, 13th ,,	2	,, 14th ,,	1				
,, 16th ,,	1						

One maternal death.

Externs:—Mr. Morrison, Mr. Morgan.

Casuals:—Mr. Bowles, Mr. Bowen, Mr. Gillingham, Mr Paddison, Mr. Hinton, Mr. Syme.

CHLOROFORM DURING PARTURITION.

I have been astonished to find how frequently, in private practice, chloroform is given during labor, but still more surprised to hear of its capital effects. I was told (1) that the very smallest quantity was required to render the parturient woman insensible to the pangs of labor; (2) that instead of retarding labor, chloroform (by the strong and regular pains which it produced) often hastened its completion. These with other inducements, such as the necessity of being able to assuage a woman's sufferings, as well as my fellow practitioners, made me most anxious to find out for myself whether chloroform really was such a boon during parturition. I must confess I felt somewhat dubious as to its beneficial action, and rather hesitated to have the double responsibility of chloroformist and accoucheur; but, whilst hesitating, I one night found myself six miles from any assistance in attendance on a primiparas, who had for three days been in labor. The os had slowly dilated and the membranes ruptured, but here matters seemed at a standstill, and for four hours there was but slight advance. The pains were irregular and slight, and the patient highly hysterical. I made up my mind that the case must require forceps, but thought I would give a few whiffs of chloroform to keep the patient quiet whilst introducing the blades. Almost the first breath sufficed to send the previously excited girl into a quiet sleep; and in a few minutes I was about to introduce the forceps, when, to my surprise, I found the head had made a decided advance, so I contented myself with giving an occasional whiff of chloroform and watching the now regular and frequent pains, as well as the straining exerted by the patient during their continuance. In rather more than half an hour the child was expelled (the perineum having yielded easily), and the mother on recovering consciousness could scarcely believe that she heard her child cry. Such was my first experience, and subsequent practice has but more firmly impressed me with the fact that in chloroform we possess an inestimable boon both to the parturient woman and her attendant.

In connection with the case above related, I cannot help quoting from BARNES' lectures on obstetric operations. He says, "A very large proportion of cases that call for forceps are first labors. The difficulty lies in the soft parts of the parturient canal, and this may be either from want of contractile energy of the uterus, or from excessive resistance of the os uteri, vagina, or vulva; this may be the result of exhaustion from fatigue, or of the discharge of the vis nervosa in other directions. Emotion, fear, the shrinking before pain, will frequently cause such a derivation of nerve force that all labor is suspended. It is in such cases that chloroform finds one of its happiest offices, by removing the sense of pain and of fear, the emotional disturbance is eliminated, the nerve force responds to the natural call, and a labor is carried out to a successful termination."

The effect of chloroform on the uterus varies with the state of anæsthesia induced. SIMPSON, the introducer of chloroform and great advocate for its employment in midwifery practice, stated in his lectures "that 3 results could be produced:—1, Suspend uterine action by a very deep dose; 2, keep it at its usual standard by a moderate dose; and 3, sometimes increase its intensity by giving a still smaller and stimulant dose."

The effects of chloroform may be divided into those produced on the mother, on the child, and on the uterus, passages and outlet.

Effects on the mother.—

1.—Assuages violent parturient pains.
2.—Subdues nervous irritation caused by severe pain, and restores nervous energy.
3.—Obviates the use of forceps by removing pain.
4.—Hastens the termination of labor.
5.—Facilitates obstetric operations.
6.—Expels placenta more easily.
7.—Lessens risk of post partum hæmorrhage.
8.—Relieves puerperal convulsions.—*Vide* Guy's Hospital Reports, 1876.
9.—Diminishes, and often prevents, after pains.
10.—Lessens the risk of puerperal mania.

Effects on the child.—

1.—By hastening the termination of labor often saves the child's life.
2.—But the child has been still-born in many cases, whether as the result of chloroform or of prolonged labor.
3.—For many days the child's breath has smelt strongly of chloroform.

Effects on the uterus, passages and outlet.—

1.—Increases or removes uterine action according to the state of anæsthesia induced.
2.—Relaxes rigidity, especially of os and perineum.
3.—Lubricates the passages by increasing the mucous secretion of the vagina.

That from the inhalation of chloroform during parturition we shall obtain all the above mentioned results, I do not for a moment mean to say; but, from the few cases I have seen, I am quite sure that both the practitioner and the parturient woman will derive advantage from its more frequent use.

[We are indebted to Mr. J. FARRANT FRY for the above.]

CHRONIC POISONING.

The following, which is communicated to us by Dr. G. O. Rees, F.R.S., Consulting Physician to Guy's Hospital, is important. The facts ought to be known to the public as well as to the profession. Dr. Rees writes to us:—"I have lately detected a source of chronic poisoning with which, so far as I know, the profession and the public are entirely unacquainted. A lady, residing in a healthy locality and surrounded by all the comforts of life, complained constantly of dyspepsia, accompanied with more nervous depression than usually attends the malady in persons of her age. I enquired into the question of poisoning; and, having ascertained that the walls of her rooms were not covered with arsenical paper, I set aside the idea that arsenic was the cause of her troubles. After a time, however, conjunctivitis occurred, with other symptoms strongly suggestive of chronic arsenical poisoning. Further examination now became necessary, and attention was drawn to the calico lining of the chintz bed curtains. This material was of a delicate green color, and, on examination, proved to contain a very large quantity of arsenic. This lady's husband used frequently to wake in the morning suffering from nausea, with a feeling of weight and oppression about the chest; and his eyes, too, became inflamed. My friend, Dr. Debus, who examined the calico, told me that the green pigment appeared to him to have been stamped all over the material, and imperfectly secured by a very thin glaze on one surface. He was much surprised at the large quantity of arsenic present. I am informed by the parties who supplied the bed furniture that this calico is largely distributed, the color being a favourite one." There is reason to suspect that a great number of persons are suffering from this form of chronic poisoning, and swallowing quantities of medicine for dyspepsia, which can only be cured by removal from the poisonous dust of their bedrooms. Dr. Rees has forwarded to us a piece of the calico. It is highly glazed, of a favourite delicate green tint, such as is much used for lining chintzes, and it is loaded with arsenic. —*British Medical Journal.*

ON DUTY FOR JUNE.

House Physicians :—Messrs. H. N. SMITH, and W. J. TYSON.
Junior House Physicians :—Mr. H. F. LANCASTER.
House Surgeon :—Mr. C. J. SYMONDS.
Junior House Surgeon :—Mr. R. E. CARRINGTON.
Senior Resident Obstetric :—Mr. A. de W. BAKER.
Junior Resident Obstetric :—Mr. J. WESTON BULL.

RESIDENT DRESSERS.

For the weeks commencing :—
May 31st, Mr. D. ELCUM (Mr. Durham.)
June 7th, Mr. GARDINER (Mr. Howse.)
„ 14th, Mr. J. T. BRETT (Mr. Cooper Forster.)
„ 21st, Mr. H. L. STEVENSON (Mr. Bryant.)
„ 28th, Mr. W. M. TURNER (Mr. Durham.)

MEDICAL EXAMINING COUNCIL.

At a Meeting of the Medical Examining Council held May 25th, 1876, the following appointments were made :—

RESIDENT OBSTETRICS.

Mr. Bull (June), Lubbock (July), Coley (August).

DRESSERS.

Mr. W. M. Evans (Mr. Cooper Forster), J. Mackern (Mr. Bryant), Ewen, Instone (Mr. Durham), J. C. Wilkinson, Lacey (Mr. Howse).

EYE WARDS.

Gathergood, G. Davies, Green, (July and August). Judson, Porter, Ingram, (September and October).

ASSISTANT SURGEONS' DRESSERS.

Maclean, Crooke, J. Poland, Chubb, (Mr. Davies-Colley).
Paddison, Horrocks, Lowdell, Earle, (Mr. Lucas).
Gibson, R. Lee, Jaynes, Apthorpe, (Mr. Golding-Bird).
Blaker, T. Hammond, Barnard, Strover, (Mr. Jacobson).

DRESSERS IN SURGERY.

Deare, Deane, Hartley, Abbott, P. James, Griffiths, Deale, Messum, Morley, J. Brock, Bryden, Reynolds, W. L. Cross, Briscoe, Coles, Stuart.

OBSTETRICS OUT-PATIENTS' CLERKS.

C. K. Shaw, L. M. B. Jones, Grimwood, (1st six weeks).
Masters, W. P. Reynolds, Lane, (2nd six weeks).

MEDICAL WARD CLERKS.

Adcock, T. A. Bell, C. St. J. Wright, Dunston, Nugent, Reader, Keer, Hammersley, E. H. Jones, Stevens, G. A. Wright, A. G. Collington, J. H. Poland.

SURGICAL WARD CLERKS.

Langley, Alexander, Graveley, Bates, Walker, Cox. M. J. Hart, Lewis, J. R. Harris, Symons, Taskern, J. Brock, Morgan, Bovile, A. B. Hammond, H. E. Wright.

P.M. CLERKS.

Barrs, Beale, Briscoe.

ASSISTANT PHYSICIANS' CLERKS.

Slater (Dr. Fagge), Johnson (Dr. Pye-Smith), Birdwood, Hinton (Dr. Taylor), Lane, Birdwood (Skin Disease).

AURAL SURGEONS' DRESSERS.

Hinton, Shaw, Johnston, Grimwood.

DENTAL SURGEON'S DRESSER.

C. St. J. Wright, G. Perkins.

OPTHALMIC SURGEONS' CLERKS.

H. O. Stuart.

ASSISTANT SURGEONS' CLERKS.

Pierson, J. R. Keer (Mr. Davies-Colley), Austin (Mr. Lucas), Cross (Mr. Golding-Bird), Evans (Mr. Jacobson).

Guy's Athletic Sports.

These Sports were held on Monday, June 12th, at Tufnell Park, and were on the whole a success, the attendance however being very scanty. Some of the times were very good considering none of the competitors had gone into training, and we have a fair chance of winning back the Shield at the United Hospital Meeting.

100 yards.

1 M. Hart.
2 — Collymore.
3 G. Perkins.

Hart jumped off with the lead and maintaining it to the finish won by 3 yards; same distance between second and third. Time, 10⅘ seconds.

250 yards.

1 M. Hart.
2 — Collymore.
3 Poland.

Poland led for the first 100 yards, when Hart passed him and won on the tape by about 2 yards from Collymore. Time, 28 seconds.

High Jump.

1 Graveley.
2 Chapman.
3 Reader.

Graveley won at 5-ft. 4½-in., Chapman and Reader tied at 5-ft. 3½-in.

One mile.

1 J. Keer.
2 H. Bates.
3 Boswell.

This was an easy win for Keer, Bates walking in for second place. Boswell ran in excellent form, but unfortunately cast a shoe early in the race.

Quarter mile.

1 J. Graveley.
2 C. Stanger.

Graveley led from start to finish, and won by 30 yards. Time, 55 seconds.

Putting the weight.

1 W. G. Gray.
2 J. Graveley.
3 J. Reader.

Gray put 34-ft. 9-in., Graveley and Reader tied at 30-ft. 8-in.

Half mile.

1 J. C. Keer.
2 S. Theed.

This was another easy win for Keer, who is a very strong runner, Theed being second. Time, 2 minutes 12½ seconds.

120 yards Hurdles race.

1 J. G. Graveley.
2 J. Reader.
3 V. V. Chapman.

Graveley, who takes his hurdles in excellent form, won by 3 yards, Reader being the same distance in front of Chapman. Time, 17¼ seconds.

Long Jump.

1 Graveley.
2 Reader.

An easy win for Graveley, who notwithstanding his previous exertions, managed to clear 20-ft, a very good performance.

The United Hospital Sports will be held at Lillie Bridge, on Saturday, July 1st. Sir William Gull has kindly consented to be President this year. It is hoped that all Students will subscribe to the Athletic Club, and no Student will be allowed to witness the Sports on July 1st, unless he has subscribed to the Club. This rule will be rigidly enforced by the Committee of the United Hospital Athletic Club.

SAVORY & MOORE'S

PHOSPHORUS PREPARATIONS.

PHOSPHORISED COD-LIVER OIL. First manufactured in this Country by Savory & Moore, and generally recognized by the Profession as the "Original Preparation." This Oil is now extensively used, and is admitted to be an important therapeutic remedy. The advantage of this preparation (which has been much imitated, though with questionable success) consists in, the ability to administer a *sufficient* dose of Phosphorus without the admixture of a *large* quantity of Cod Liver Oil[1] *Vide* case of Phthisis treated by this Oil. *The Lancet*, April 24, 1875.

PHOSPHORISED COD LIVER OIL with QUININE.

COMPOUND PHOSPHORISED COD LIVER OIL, containing besides Phosphorus, Iodine and Bromine

SUPPLIED IN BULK OR SMALL BOTTLES.

PHOSPHORISED LINIMENT. A Continental preparation used with success in the treatment of Rheumatism, &c.

PHOSPHORUS PILLS of any size and strength, non-resinous, and perfectly soluble; the most reliable and agreeable method of administrating this remedy.

As much of the uncertainty of operation experienced in the internal administration of Phosphorus is to be traced to the use of Oxodised or Allotropic Phosphorus, Messrs. SAVORY & MOORE beg to state that the foregoing Preparations contain only the *purest* description of this article, which is more certain in its action, and therefore more satisfactory to prescribe.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

JOHN B. MEDLAND,

MICROSCOPE & SCIENTIFIC INSTRUMENT MAKER.

MEDLAND'S STUDENTS' MICROSCOPE, COMPLETE £3.

An excellent Working Instrument.

EVERY DESCRIPTION OF APPARATUS FOR MICROSCOPICAL PURPOSES, MOUNTING FLUIDS, GLASS SLIPS, CELLS, THIN GLASS COVERS, &c., &c.

CLINICAL THERMOMETERS from 7/6. **URINOMETERS from 3/6.**

Photographs of Guy's Hospital, Portraits of Guy's Medical Staff, Eminent Medical Men, &c., &c.

10a, BOROUGH, LONDON BRIDGE

(CLOSE TO THE RAILWAY ARCH).

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine, and Surgery.

NEW SERIES.—No. 7. JULY, 1876. SIXPENCE.

CONTENTS.

Clinical Lecture on Acquired and Inherited Syphilis... 75

Mental Diseases 77

Notes on Case of Heart Disease 78

Statistical Report... 79

Leading Article 80

Notes of the Month 81

Clinical Medicine 81

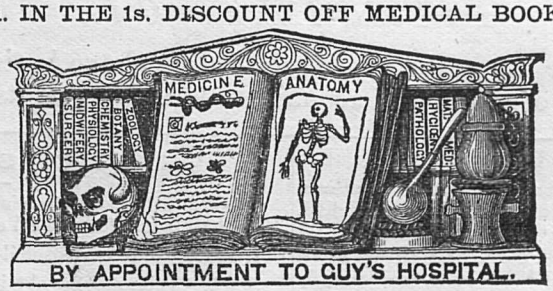
Salicylic Acid and Salicin in Acute Rheumatism ... 84

United Hospitals Athletic Sports 85

On Duty for July... 86

3d. IN THE 1s. DISCOUNT OFF MEDICAL BOOKS.

NOTE BOOK FOR EXPERIMENTS IN ANALYTICAL CHEMISTRY, 2s.



NOW READY.

Mr. BRYANT'S NEW SURGERY,

2 VOLS., 19s.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

BOOKS BOUGHT OR TAKEN IN EXCHANGE.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

ADULTERATION OF CIGARS.—A New York paper mentions that a great quantity of brown straw paper lately reached Havannah, which was to be employed in the manufacture of Havannah cigars. Straw paper impregnated with the juice of tobacco stalks is wound up with the leaf in such a way that it is often impossible to detect the adulteration. Dr. Jacobson remarks that there is no difficulty in escaping detection, if the paper be specially prepared for the purpose out of suitable raw materials. It has long been known that cigar paper soaked in a solution of soluble glass gives forth no smell of paper on being burnt.—*Medical Examiner.*

TERMS OF SUBSCRIPTION.

The "Gazette" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to MONTAGU LUBBOCK, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Lecture

ON ACQUIRED AND INHERITED SYPHILIS.

BY R. CLEMENT LUCAS, B.S., F.R.C.S.

Syphilis is a constitutional state giving rise to a number of local conditions, which it is most useful to be able to trace to the original disease. These local affections may be due to acquired or to congenital syphilis, and we will first glance at the course taken by acquired syphilis. The history will be much as follows:—

A man after impure connection perceives on his penis a slight abrasion, which after a week or fortnight presents an indurated base, and from which the discharge is scanty serous rather than purulent, and often drying so as to form a scab on the surface. The lymphatic glands then enlarge, first in the groin, and then throughout the body, but are not necessarily tender or painful. A sore, such as that described, followed by amygdaloid glandular enlargement will probably be followed by constitutional syphilis; whereas a soft sore around which there is no induration will probably not give rise to syphilis, though such may be the case.

The element of time is important. A sore noticed for the first time some weeks after connection is usually followed by secondary symptoms, whereas a painful spot noticed within the first twenty-four or forty-eight hours is less likely to be the precursor of constitutional syphilis. An itching painless lump is more to be feared than a painful abraded surface. When a characteristic hard chancre is present you can safely predict secondary symptoms, but you must be cautious in stating that other chancres will not be followed by an eruption. M. Dubuc has recently described a form of primary affection consisting of a number of small erosions, like those left by herpes, as invariably followed by constitutional syphilis.

Preceding the secondary eruption, pains are felt about the bones; the glands in the groin enlarge but do not tend to inflame or suppurate, and the glands in the axilla, neck, and other parts of the body become similarly affected.

Six weeks or two months after infection a rash appears, perhaps roseolous and resulting from injection of the capillary vessels and straining of the skin *(roseola, maculæ)*, perhaps papular, and consisting of solid elevations *(lichen)*, perhaps squamous, consisting of larger patches with scales on the surface *(psoriasis)*. Impetiginous forms are more rare but may occur. Early vesicular syphilide *(herpes)* is still rarer. All of these eruptions are of a coppery colour, and form especially on the flexor surfaces of the limbs. Bullous syphilide *(pemphygus* or *rupia)* may be met with in the secondary stage.

Shortly after the appearance of the rash, the patient complains of sore throat, and condylomata appear about the anus or tongue; these condylomata are supposed to be due to an eruption similar to the cutaneous eruption being developed on a moist surface, and they grow to a large size on account of the moisture and soft yielding nature of the surface. Mucous tubercles or condylomata consist of thickened patches of enlarged papillæ with a red or grey moist surface like that of a mucous membrane. Meanwhile the hair gets thin, and sometimes the whole of the eyebrows and eyelashes are shed.

A little later, as the rash is disappearing, syphilitic iritis may occur. Mr. Poland used to teach that this affection, which is characterised by a large effusion of lymph on the surface of the iris in small reddish brown nodules, is usually associated with the eruptions on the skin which also contain lymph; viz., the papular and squamous syphiloderms. The treatment will be to keep the pupil dilated by means of a solution of atropine, so as to prevent adhesions occurring while the pupil is contracted, and to give antisyphilitic remedies at the same time. Then may follow a retinitis, characterised by the swollen optic disc, the hazy retina, and the large bloodvessels (as seen by the ophthalmoscope); it also requires antisyphilitic treatment. In the majority of cases the eyes altogether escape. The rash lasts from two to six months, and even, if left untreated, will disappear in a year or eighteen months. Periostitis may occur, tending also to disappear in about the same time.

With the sore throat, cracks along the sides of the tongue may be met with. The sore throat is ulcerated, but the ulceration is to be distinguished from that occurring in tonsillitis by being in the latter case confined to the tonsils, whereas syphilitic ulceration may also affect the fauces, hard palate and pharynx. The ulceration in the secondary stage is always superficial.

Deafness may occur, the cause of which is doubtful: it is, perhaps, due to obstruction of the Eustachian tube by inflammatory thickening and ulceration of its lining membrane. A temporary albuminuria is occasionally met with.

To this secondary stage succeeds an interval, which may last months, years, or perhaps for the rest of the patient's life, during which slight relapses of any of the above symptoms may take place, or good health may seem to exist. The tertiary stage then comes on, characterised by the following conditions:—

Masses of lymphy exudation, called gummata, may form in the areolar tissue, tendons or muscles; syphilitic psoriasis may attack the palms of the hands and soles of the feet; large vesicles forming scabs, below which ulceration extends (*Syphilitic Rupia*), or pustules leading to ulcers (*Syphilitic Ecthyma*), or deep ulcerations following softened gummata may attack any part of the skin. The uvula and the pillars of the fauces may slough away, the ulceration perhaps extending to neighbouring parts. Nodes on the bones may occur,

the inflammatory products throughout sometimes ossifying. Circumscribed periostitis of two separate bones is an almost certain indication of syphilis; as, for instance, a clavicle thickened at one spot, accompanied by a bony swelling on the head. The liver may become affected, the puckerings found in that organ after death being usually due to syphilis. The kidneys may be also diseased, and a syphilitic phthisis has been described. The bones of the nose may be affected, and, when eaten away by what has been termed "Lupus Exedens," syphilis has been really the cause in most cases. The brain may also suffer; and finally amyloid disease may result, affecting, perhaps, the liver, spleen, kidneys and other parts.

Syphilitic ulcers present the following peculiarities:—1.—They occur frequently on the outside and high up on a limb, whereas varicose ulcers are almost always found low down and on the inner side. 2.—They are usually preceded by a swelling (*gumma*). 3.—At first circular, as if "punched out," with a greyish-yellow wash-leather slough on the surface. 4.—Afterwards very irregular, healing at one part and spreading at another, so as sometimes to take the shape of a horse-shoe. 5.—The edges are commonly festooned, from marginal gummata breaking down into small circular ulcers and joining with the main sore. Ulceration in front of the knees spreading from a number of separate centres is pathognomonic of syphilis. Syphilitic ulceration of the rectum is a frequent cause of stricture. Ulceration may also occur in the larynx, trachea, or bronchi, and the subsequent contraction may cause a narrowing (stenosis) of the air tubes.

CONGENITAL SYPHILIS.

The transmission of hereditary syphilis seems possible in four ways:—

1.—The mother being healthy, the father has had syphilis, the sperm-cell being therefore tainted. This is generally believed to be the most common mode of transmission, but Cullerier, Oewre, Erichsen and others hold that the mother is always first infected by the father before the child suffers.

2.—The father being healthy, the mother has had syphilis, and the germ-cell is tainted.

2.—Both parents are diseased, and both germ-cell and sperm-cell therefore tainted.

4.—Both parents are healthy at the time of conception, but the mother contracts the disease during pregnancy and transmits the disease to the offspring through the placental circulation.

Dr. Kassowitz, of Vienna, denies this latter mode of transmission, and he supports his opinion partly by pathological and partly by clinical observations. Following Pelizzari, he holds that the syphilitic virus attaches itself to cells and that it is not conveyed by the fluids of the body. Pelizzari applied syphilitic blood upon cherpia to an abraded surface on a healthy man, and in this way succeeded in inoculating him with syphilis. To another person he applied, in a similar way, the liquor sanguinis after the blood had coagulated, but no inoculation followed. If pus or blood cells are essential for the conveyance of syphilis, it follows, as the fœtal blood does not mix with the maternal in the placenta, that the poison cannot be transmitted through the placenta from the mother to the fœtus or from the fœtus to the mother. This however is contrary to generally received views.

Congenital syphilis may occur in a child whose mother has never shown signs of the disease. Colles, of Dublin, collected such cases, and found that these children never gave the disease to their mothers, though doing so to the wet-nurses who nursed them; and it would seem that the fœtus gives to the mother such a mild form of the disease, that the secondary symptoms fail to be developed or are overlooked, though tertiary may afterwards appear. Hutchinson has recently given his support to this view, which he terms Colles's law.

The fœtus then has syphilis. Usually the woman has first several miscarriages; then perhaps a child at full time, dying shortly after birth; then a child healthy at birth, which about three weeks later develops an eruption and begins to snuffle at the nose in a way which interferes with suckling. These symptoms usually appear in the third week, but may do so at any time until the end of the third month. The eruption appears on the buttocks most freely, owing to the irritation caused by the urine and fæces coming in contact with the skin; it is of a reddish-brown colour, and made up of circular patches, often shining, and which may scale a little. An eruption of the same kind may be also seen on the arms and face: cracks about the lips and inside the mouth, patches on the tongue, condylomata round the anus may develop later. The earlier the appearance of the rash, the more active is the poison; whilst a rash late in appearing is an indication of the poison wearing out in the parents.

As the child becomes older, the mouth may become inflamed throughout, and the general stomatitis may cause the teeth to assume a special aspect. Iritis may come on, even retinitis, and the hair may become thin and come out. The child meantime gets thinner. These symptoms last from two to six months and then cease, though Hydrargyrum cum Cretâ given to the child or Iodide of Potassium to the mother hastens the recovery.

An explanation seems necessary to account for the apparent regularity with which the eruption appears at a certain time after birth. Some have supposed that contact with atmospheric air brings out the eruption; whilst others have built upon it a new theory of transmission, and hold that the fœtus is inoculated by the blood of the mother at the time of the separation of the placenta.

M. Parrot has described under the term "Pseudo-paralysis of inherited syphilis,"* a disease somewhat

* A typical case of this affection is now attending among Mr. Lucas's out-patients.

resembling rickets, and accompanied by inflammation of the diaphysis at the epiphysial extremity, together with the layer of ossifying cartilage; thickening occurs on the outside and softening within, which may end in suppuration and the separation of the epiphysis from the shaft. The affection is less general than rickets; it might be termed syphilitic rachitis.

Dr. Taylor, of New York, speaks of a dactylitis syphilitica in which all the tissues of the finger are inflamed, specially the periosteum and bone; the epiphysial cartilage is destroyed, and the finger consequently shortened. From the resemblance of these symptoms to those due to scrofulous inflammation, it would seem that the nature of the affection might be strumous rather than syphilitic. Several cases exactly answering to the description given of this affection have been under my care during the past year, but in all a scrofulous, and not a syphilitic, diathesis gave origin to the disease.

The temporary teeth show no special marks of syphilis, but tend very early to decay. The permanent teeth are often affected, specially the central upper incisors. These show a broad vertical notch in the horizontal edges, and perhaps a groove running down the anterior or posterior surfaces. The teeth besides being notched (which must be distinguished from being marked with serrations, which is no indication of syphilis) are always narrowed at the free edge, this being most characteristic of the disease. The narrowing of the teeth may be present when no notching has taken place. Other teeth, and most commonly the canines, may terminate in little pointed processes (pegged teeth). The first molar tooth has been also shown by Mr. Moon to be characteristic, being contracted at the edge, and having the cusps constricted into a narrow space.

Interstitial keratitis has been described by Mr. Hutchinson as another symptom due to the inherited taint. This does not occur in acquired syphilis, but in children and young persons from five to eighteen years of age affected with the inherited disease. The affection commences with some intolerance of light and injection of the vessels around the cornea. Little white specks appear in the substance of the cornea and gradually run together so as to cause a diffused opacity. It attacks both eyes. Phlyctænular ophthalmia must not be confounded with this. It is distinguished by small whitish elevations (*phlyctænulæ*), forming in and around the cornea and ending in ulcers. The opacities left by these are limited and do not spread, and the disease tends to get well under tonic treatment and fresh air.

There is sometimes ulceration about the lips, in the form of cracks and fissures, which when healed leave marks around the mouth.

Deafness may occur, the exact lesion being unknown.

Periostitis and nodes on the bones occur as the result of congenital spyhilis, and are quite as characteristic as when due to the acquired disease.

Destruction of the bones of the nose, and perhaps of the cheek, eyelids, and even eye, may be caused by the disease (*Syphilitic Lupus*).

Gummata may form in any organ, and when in the cellular tissue may break down and form the most typical syphilitic ulcers, just as in the acquired disease. The affections of the internal organs I must leave to the physicians, but I may mention that a particular disease of the liver, often associated with peritonitis, has been ascribed to congenital syphilis, and also a disease of the lung.

In comparing the inherited disease with the acquired, it will be seen that the chief differences are due to the action of the virus upon developing tissues. The pseudo-paralysis, the diffused corneitis, the notched teeth, are all brought about in this way, and a characteristic physiognomy is stamped upon the victim; so that when he arrives at adult age he is stunted and ill-developed, with a square forehead (the result perhaps of early arachnitis), flat nose, pasty skin, notched teeth, hazy cornea, and still liable to all lesions attributable to the disease in its tertiary stage.

Mental Diseases.

By Dr. G. A. SAVAGE, of BETHLEHEM HOSPITAL.

NOTES ON LECTURE I.

We shall first look at Insanity in its relation to crime and to physical diseases, discuss what is meant by Insanity, and glance at some other general questions involved in the study of mental diseases before we pass in the second lecture to a more careful investigation of the causes.

Insanity has for too long been looked upon as a soul disease, a kind of demoniacal possession, and not a flesh and blood disease. Insanity of all varieties has also been considered as an incurable malady, so that patients once suffering have always been mistrusted. Remember, a person may overstrain his brain as surely as he may sprain his ankle. It is only some cases of Insanity that are recurrent, I have known many live active useful lives for many years after an attack of Insanity.

There is no fixed definite line between Sanity and Insanity. The question is often one of time or of degree.

A patient sane a week ago may be mad now; again, the actions of one person may be sane for him but the same actions would be signs of Insanity in another; thus eccentricity may be nearly allied to Insanity and be tolerated as long as the individual himself is affected. The only true guide or standard as to Insanity is the comparison of the mental state now and at some past time. We often see a slow steady change thus:—an industrious parent become an irritable roué, as the results of mental disease. The knowledge of right and wrong is not a standard of mental health, many insane people know and act on such knowledge. The presence of delusions is not necessary in Insanity. There is not one pathognomonic sign: Insanity, and the feeling in it, resemble dream life.

No one can be perfectly reasonable, and if such a being existed he would probably have to pass his life in an asylum.

I shall not consider the history of Insanity and its treatment. It is sufficient to notice that in times of culture it is treated as a disease, and in times of darkness as a spiritual ailment solely. In my lectures I shall consider that mentel disease is always due to primary or secondary disease of the nervous tissues, but you must remember the nervous tissues cannot be isolated in their functions and that they may suffer with the rest of the body. I have seen a maniac cured by quinine because he was really suffering from Ague. A cancer in the stomach may call up a delusion that wild beasts are fighting in the abdomen, and Rheumatic Fever may be associated with Melancholia, both joints and nerve tissues suffering Many give up post-mortem examination in asylums because such slight changes are found in the brains, forgetting that as a fine watch needs but a fine grain of sand to injure and stop it, so the brain is readily deranged by trifling causes. I can say that I have never yet seen a healthy brain in our post-mortem room at Bethlehem.

One of the chief difficulties in studying Insanity is to maintain your interest. The stages of a fever or a pneumonia are short and easily watched, but in a life-long disease the threads of interest get entangled or broken.

Above all things get to look at Insanity as a bodily disease just as you do at Bright's disease or at disease of the stomach. One may enforce this by a likeness. A stomach may be depressed and refuse to digest readily and so may a brain, and just as a stomach may reject in an altered state what is presented to it, so the brain may pour out altered and acrid thoughts.

Some knowledge of Psychology is required for the careful study of mental disease as it is the anatomy of the subject. You must begin by knowing yourselves.

An insane person goes through a similar process in knowing himself. Just as you take one part of your brain to examine the rest so does he, and just as you judge of your sanity by the feeling of likeness or similarity in the compared halves so does he. It is rare to be able to persuade a man that he is mad. Do not lose sight of the mental powers in lower races of men and in the lower animals, the observation in such cases will help to solve some of the many puzzles of mind working. We shall have to point out both insane processes of reasoning and also insane perception, one person perceives things as we do but reasons differently, we say falsely, as to their significance, thus:—a patient sees a cat's tail erect and says it is done to annoy him.

We often see an insane faith, you may reason with them but in the end they still believe themselves. This was well marked in an old Barrister who was in Bethlehem recently, who insisted that Jesuits and Freemasons had combined to galvanize him. Do not expect to find any one peculiarity that is characteristic of Insanity. In an asylum you see the same failings and passions as you see in ordinary men but there is less dissimulation. The lights and shadows are more marked. As the insane patient said to me "You are quite as Insane as I am, but you are not as honest, because you hide your Insanity."

Dr. MAUDSLEY has well written on the relationships of Crime and Insanity, pointing out the borderland in which there is some crime and some Insanity. It will not do to look too leniently on crime or too harshly on disease, the time has not yet come when thieves are sent to hospitals and cases of typhoid to jail. The relationships of Insanity must be traced with other neuroses; the neurotic tree has many branches, including Neuralgia, Epilepsy, Hypochondriasis, Hystera, Chorea, and perhaps some forms of Rheumatism. We see sometimes relationship between crime and one or other of these diseases. Lawyers but rarely allow that moral perversion can be due to brain disease, nevertheless it is, an acute attack of mania may leave an honest man a thief.

Spoilt children in many cases come into the world prepared to be spoilt, they are not nervously healthy. A partially insane person has been declared capable of making a will or of committing a crime and has been punished unless the crime was proved to be the offspring of his delusion. The question of responsibility in criminal trials raises a false issue. Cases of "monomania" have almost certainly some other insane conditions besides the *one* morbid thought. In Insanity any or every part of the nervous system may suffer, thus often complete anæsthesia is present in general paralysis and also in some cases of mania, on the other hand some cases of mania are very sensitive; the muscular sense is impaired in general paralysis, special senses are also affected and often perverted. Hallucinations arising and altering the mental state of the patient. The emotions are powerful agents in raising mental storms, and may lie utterly beyond the patient's control. The affective side of Man's nature is soon changed in Insanity, the intellect and will become altered in every possible way, in some cases all the mental life being centred in one fanciful idea. The memory is often perfect in mania and melancholia and you must remember that what you say in the patient's hearing may be a power for good or evil stored up. In some cases long lost memories are revived, thus a language that had been forgotten was again spoken. The will depending on other parts of the mind is variously affected, in many depressed states we find great hesitation and want of will.

We must remember that it is not everyone that will go mad. Hereditary tendency is the great cause, this is increased by the addition of other inherited tendencies to degeneration, thus I think worse of a patient who has Insanity in one parent and Phthisis in the other.

Bad education has to answer for some nervous break-downs. I believe that you may educate into a vicious habit of mind, There is too much of the herding in education, treating children as all alike. Objective teaching should be more used. In studying Insanity the sexual functions are constantly requiring notice and must be considered as great causes of disturbance; self control is the greatest achievement, but we must own that unsatisfied desire does harm in some cases.

Religious excitement produces Insanity in weak-minded people, the highest effects of religion are useful and good as they enable men to submit to misfortunes philosophically.

Over mental work rarely does harm unless the work is more mechanical than mental. Worries and small moral blisters are greater causes of mental trouble, the constancy of such irritation being as injurious as the monotomy of some employment.

In concluding this introductory lecture I would say, ever look at Insanity as a Physical Disease and treat the conditions of the disease and not its form.

(To be continued.)

NOTES ON A CASE OF DISEASE OF THE RIGHT SIDE OF THE HEART.

REPORTED ON BY W. LANE.

3 Philip, under Dr. Moxon.

Charles Harborough, æt. 26. Admitted Jan. 27.

Occupation.—Steward at Sailors' Home.

Family History.—Mother died of Phthisis (?)

Previous History.—Suffered from winter cough since birth but always ran about like other boys. Never spat up bood. Had short attacks of rheumatism which prevented him putting his boots on. For the last year has never been free from colds. Had gonorrhea.

Present Illness.—A month ago his cough became worse and his breath very short; 2 weeks ago his legs were swollen in the evening after his work, but were natural in the morning. The dropsy and dyspnœa became much worse on 24th inst. On 25th and 26th could not get out of bed. On 27th came in.

Admission.—Sitting up in bed, breathing in great difficulty; face blue, background of tawny yellow; lips and ears livid and extremities cold. Has tensely œdematous ecthymatous patches on legs. Respiration thoracic. Supra-clavicular region becomes concave but abdomen is not drawn in. Great *dyspnœa. Sputum frothy and thick. Chest broader in* antero-posterior diameter than laterally. Very prominent and bulging over cardiac region on left side. Percussion note about normal. Liver extends higher up in front diminishing the size of the lungs. Pleuritic rub over front of sternum and right lung. Behind resonance good. Inspiration and expiration sounds of equal length, the latter being sometimes followed by a sharp wheezing.

Heart.—Apex, 2 inches below and outside nipple; simple thud communicated to the hand, no heaving sensation. Precordial dulness from lower border of 2nd intercostal cartilages and from one and a half inches to right of sternum. Loud rumbling bruit heard at lower end of sternum, which diminishes in loudness and assumes a more whiffling character as it proceeds up the sternum, it does not extend into the arteries of the neck and is much weaker towards apex where it is also heard.

Pulse, irregular, weak, 96.

Ordered Tr. Digitalis ℥xv. Sp. Chlor. Co ℥xv. Aquae ℥ j. 4 tis horis.

Bruit is not heard behind though heart sounds are loudly audible.

Urine.—Reddish deposit, s.g. 1025; slight cloud of albumen. Has pain in chest catching him on breathing.

29th, more pain, dyspnœa worse; not much affected by the digitalis yesterday. He took at 10 a.m. ℥xxii.; at 2 p.m. ℥xv.; and at 10 p.m. ℥xxx.

Has pain on deep inspiration.

30th.—Dr. Moxon saw patient to-day, ordered warm bath and venesection ad ℥ vi. He thought the pulmonary artery was much dilated. Sphygmograph showed no dicrotism.

31st.—Intense dyspnœa. Pulse, 120, weak. Patient is too weak to sit up in bed.

Urine.—Pink deposit, s.g. 1024, dissolves in liq. potassæ. Slight cloud of albumen.

Patient was somewhat relieved by the bleeding. As he was very anxious to sit up, Mr. Forty allowed him to sit in the chair by the fire; he felt much relieved while in that position. Towards morning he became gradually worse, and shortly before he died he got out of bed and would not be persuaded to get in again. He sat down—but soon afterwards in attempting to return to his bed he fell down and died almost immediately at 5·20 a.m.

At the post-mortem examination on January 1st, 1876, the following appearances were found:—

Heart weighed 28 ozs. Right side much enlarged. Right auricle being 5 or 6 times as large as the left and much hypertrophied. The septum auriculorum was almost absent, the circumference of the opening being between 4 and 5 inches. The left auricle was smaller than normal. The tricuspid orifice allowed the 4 fingers and thumb to pass easily through it, while the mitral only admitted three. Valves healthy. The right ventricle also was greatly enlarged, its walls measuring an inch in thickness at widest part; the left of natural size, thickness of walls ⅝ inch. The pulmonary artery was very large, the circumference at base being 4 inches; its walls were thick and extensively atheromatous. The aorta was very small, its descending part being only 1½ inch in circumference, its coats healthy.

Recent pleurisy in left side and the pleura contained a pint of blood-stained fluid. Left lung compressed at lower part. *Right Lung emphysematous. No pus in tubes.*

Liver, 58 ozs. Somewhat nutmegged and indurated.

Spleen, 6½ ozs. Indurated.

Kidneys, 13 ozs. Red and indurated, otherwise healthy.

Brain, 48 ozs. Congested but healthy.

STATISTICAL REPORT OF LYING-IN CHARITY FOR MAY, 1876.

Number of women attended			195.
Recovered	193.		
Died	2.		
	195		
Women attended in 1st confinement			31.
" " 2nd "			27.
" " 3rd "			27.
" " 4th "			27.
" " 5th "			18.
" " 6th "			18.
" " 7th "			11.
" " 8th "			10.
" " 9th "			9.
" " 10th "			7.
" " 11th "			4.
" " 12th "			2.
" " 13th "			2.
" " 14th "			1.
" " 16th "			1.
			195
Full time children.			
Males alive	91.		
" dead	5.		192
Females alive	92.		
" dead	4.		
Premature deliveries, 6 to 8 months.			
Males alive	1.		
" dead	1.		3
Females dead	1.		
Abortions at 3 months, 2 (one male)			2
			197.
Number of dual births			2
Single			193
			195
Presentations.			
Vertex		179	
Breech		8	
Brow		3	
Face		2	
Foot		3	
		195	
Operations.			
Forceps	1		
Turning...	1		
	2		

Externs:—Mr. J. H. Poland, Mr. H. L. Bates, Mr. S. A. Davies, Mr. S. H. Moore, Mr. J. R. Hardinge, Mr. R. W. Lethbridge.

Casuals:—Mr. E. Lynn, Mr. S. S. Bowles.

Resident Obstetric Assistants:—Mr. A. de Winter Baker, Junr., Mr. J. W. Bull, Senr.

GUY'S HOSPITAL GAZETTE, *JULY*, 1876.

WE do not wonder that the Medical Profession is not altogether pleased with the truly marvellous concoction, which the Government has produced under the name of "A Prevention of Cruelty to Animals Bill." But could much better be expected of the Government which sacrificed the health, happiness and morality of the working classes that it might discharge its obligations to the publicans? In obedience to a crowd of ignorant sentimentalists, they have undertaken to legislate upon a matter of which they knew nothing.

The appointment of an influential and well informed Royal Commission was a good beginning. But legislation in accordance with the carefully weighed conclusions of this competent body of men would never have sufficed to obtain for the Government that measure of popularity which it has hoped to gain by yielding indiscriminately to popular agitation. Popularity, not good legislation, was the object of the Government. Hence the proposed bill, with its objectionable title and worse contents.

What, for instance, is the meaning of the exemption of Cats and Dogs? The latter we presume owe their immunity to the bathos of sentimental penny-a-liners, who write reams of balderdash about the "faithful companion of man," etc., etc.

We suggest that the former must thank the old maids, who are in fact the chief movers in the agitation.

But, if the bill were cleared of defects in detail, of which the above is but a fair specimen, we should still hold that nothing short of improving it off the face of the earth would be a satisfactory conclusion of the matter. Any bill, proposing penalties which cannot be enforced, because the offence cannot be brought to light, tends to bring legislation into contempt. The bill might, if it became law, hamper and annoy men of real science, who, from their eminence, would have little chance of escaping publicity. But any student, who might choose to do so, would be able to "interrogate nature" in secret at his own sweet will, with small risk of getting into trouble because he had refused to place himself under a vexatious police regulation. Nobody outside his own family circle need know of his experiments. For if a few cats and dogs after coming into his possession should mysteriously disappear, who would be able to call for an account of their fate? The mode of their demise need not be reported to the Registrar, nor would a Coroner's inquest be held.

Few people will take the trouble to bring a case into court, unless their own interest is at stake, especially where they would find it very hard to prove their point. We do not say that there would be no convictions. But ordinary care would make it so difficult to procure evidence, that few, who had a mind to do a little secret experimenting, would be deterred by the legal prohibition.

It is true a man who might have made an useful advance in science might be prevented from publishing his results. So science would lose and the brutes be no gainers. Indeed, probably independent observers would perform the same experiments in many cases, so that the bill would really work against its ostensible purpose. And it is quite likely that, while it would act as a stimulus rather than a deterrent of mere pseudo-scientific animal-carving, it might give rise to vexatious attacks upon upright men. And, as the scientific value of the result would be no justification of an experiment, if it happened to be performed by an unlicensed person, a respectable man might find himself declared a criminal for an act, which none but old women (of either sex) would consider to be other than praiseworthy.

It would appear to us that the only legislation on the subject which would be of practical value, would be a clause in a general bill for prevention of cruelty to animals, enacting that the plea of scientific experiment should not be considered sufficient justification of the infliction of pain upon an animal, unless it were shown that the experiment was bonâ fide scientific and conducted with sufficient care to avoid all unnecessary suffering.

Anything further than this can do little if any good, and must do harm.

But, if we should oppose all special legislation, we should certainly look upon the present bill as a specially objectionable hodge-podge. A few of its more glaring evils were well put before Lord Carnarvon by Mr. Earnest Hart, as the leader of a deputation from the British Medical Association. The Noble Lord's answer was an awkward evasion, and we can see but little reason beyond an excess of politeness, for thanking him for a meaningless promise to reconsider the minor details of the bill. But when was a politician amenable to reason? He has nothing to do with reason. His duty is to support his party. The duty of the profession which it now suits the Government to insult, in obedience to the clamour of ignorant sentimentalists is to save life by the aid of science.

We have no right to boast of what we do or try to do. Politicians have no reason to be ashamed of what they do. We both do our duty. That is all!

AS the year of work draws near its close one requires to be no Asmodeus or other person of more than common astuteness to pick out the men who are in mental training for the final struggle, whose reward will assume the pleasing and tangible form of medals and money. Neither of these has become antiquated or lost its power to stimulate, and we hope that neither ever will, fori n spite of the philosophical platitudes with which the conquered in the race console themselves, rewards which combine both abstract and concrete good are yet potent in bringing the best men at Guy's to the front. Of course good men will always do good work and find their all-sufficient reward therein—indeed the best men will accomplish the greatest things with utter indifference to the opinions of the world, and carelessly take a low place among their fellows when they might, without effort, step into a higher one.

But such a condition of things is very obviously desirable for neither staff nor students, so undesirable indeed for the former that a hundred or two a year is well and economically applied for its prevention. It is with the more regret, therefore, that we note the changes which have recently been made in the money prizes of the second and third years; changes, which to speak very mildly, as is our wont, can hardly be attended by satisfactory results. That the front-rank fresh-men will have a large sum of money to compete for next October is doubtless a matter on which they will felicitate themselves; that the best men in the higher years who have done good work for Guy's as well as for themselves will be the losers of that sum of money is a fact of chastening significance, and we feel curious to know if its authors are proud of it.

NOTES OF THE MONTH.

Zürich is never behind in gallantry; the University has just conferred the degree of M.D. upon Miss Julia Sinclair. Yet, though we admire their example, we stand timidly hesitating to follow it.

Herr Riedlinger of Würzburg has injected a solution of Ergotin (one in six) subcutaneously for redness of the nose following frost bite. The patient had headache but his appearance improvd.

The number of Students at the German Universities seems to be somewhat declining. They stand at present thus:—Vienna, 820; Wurtzburg, 548; Leipsic, 428; Munich, 347; Berlin, 263; Strasbourg, 191; Heidelburg, 85; Giessen, 83. The last three have fallen off of late in an especial manner.

The lead-lining of cheap snuff boxes is the assigned cause of two recent cases of chronic lead poisoning; both were rather severe. Snuff-takers will be pleased to accept this intimation.

Clinical Medicine.

BY FREDERICK TAYLOR, M.D.

THE TREATMENT OF TYPHOID FEVER.

At the last moment I have chosen Typhoid Fever as the subject of my lecture, because in a case now lying in No. 7 bed, I am applying a method of treatment, the principle of which I feel sure is not fully understood. I refer to the bath treatment which has been so thoroughly carried out on the Continent, but which, so far as I know, has been received with much less approval in England. I shall not be able on this occasion to say very much for it or against it from my own experience, which only extends to seven or eight cases; an experience far too limited to draw conclusions from in a disease running the course of Typhoid Fever, especially when it is considered that the evidence of others rests on the observation of over 1000 cases. I intend, therefore, chiefly to explain its action, and to recount to you the theoretical considerations which have led to its trial, as well as the practical results

which appear to demonstrate its value. Its application will be in part illustrated by the case, which is as follows :—

J. S., aged 10½, was admitted under Dr. TAYLOR, June 14th, 1876. He appears to have been quite well until Monday, June 5th, when he complained of feeling sick, and had pain in the stomach, headache, and thirst. The following day he vomited two or three times, lost appetite, and wished to lie down.

On the night of June 7th, he was restless, and the following night got out of bed several times. After the 9th he was confined to his bed, and on the 13th his bowels were moved three or four times, though up to this date they had been in a normal condition. These loose motions were pale yellow and very fœtid.

On admission.—He was drowsy, with slight delirium, and complained of frontal headache. The cheeks were flushed, the lips cracked. On the chest were six rose spots, but there were none on the abdomen. First sound of the heart feeble, chest free from râles. Evening temperature, 102·9°; pulse, 118; respiration, 34.

June 15th.—Lying on right side, drowsy. One motion during the night, loose, abundant, yellowish-brown. Rose spots on the chest and right thigh. The edge of the spleen can be felt below the ribs. Morning temperature, 100·9°; pulse, 112; respiration, 32. Evening temperature, 103·8°; pulse, 120; respiration, 36. During the last 24 hours he has taken 3¼ pints of milk.

On the 16th, Dr. TAYLOR directed that if his temperature was above 103° when taken at 10 p.m., he should be cooled by a bath. The evening temperature was only 102·5°, but at 3 a.m. and 8·45 a.m. on the 17th, it was above 103° F., and as after a slight fall it was 103·2° in the afternoon, the bath treatment was at once instituted. He was placed in a full-length bath of 85°; the limbs and trunk were gently rubbed to ensure contact of the water, and as he complained a good deal of the cold he was removed after only eight minutes, being dried and placed back in bed. Shortly after the bath his temperature was 97·5°, from which point it rapidly rose to 102·2° at 5 p.m., and 103·9° at 9 p.m. At this hour he was again bathed, and from this time the observations on the temperature have been made at fairly regular intervals of three hours during the day, a bath being administered each time that the thermometer registered over 103°.

June 17th.—12 p.m., temperature 103·6°. Bath for ten minutes at 83°. Temperature after the bath, 98·5°.

June 18th.— He had previously had some cough, and on this afternoon some rhonchus was observed. Morning temperature, 101·6°. At 4 p.m., temperature, 104·1°; a bath reduced the temperature to 99·3°. At 7 p.m. the temperature was 104·4° and he was again bathed.

June 19th.—Bowels open four times last night. Is rather deaf. In the evening much rhonchus noticed, was bathed four times. At 1·20 a.m., temperature, 103·3°; at 12·30, temperature, 103·3°; at 3·50 p.m., temperature, 103·4°; and at 8 p.m., temperature, 103·7°.

This morning, June 20th, he received one bath shortly after midnight, the temperature being 103·8°. It is the 16th day of his illness, he has numerous rose spots, the bowels are not relaxed, he lies frequently on his side, he has well marked but not very severe bronchitis. His tongue has not as yet been very dry, it generally shows a thick white fur. On the whole he looks fully equal to the remaining days of his illness.

For some years at this Hospital and elsewhere, Typhoid Fever has been treated on the expectant plan; *i.e.* no attempt has been made to check the course of the disease. The patient has been carefully nursed, carefully fed, and the various complications have been met as they have arisen by appropriate remedies. Among the complications abundant diarrhœa, bronchitis, and cardiac failure are the most frequent; while intestinal perforation or hæmorrhage may occur and bring about a fatal result. But there is one other condition always present, indeed part of the disease, which has of late been regarded as a permanent source of danger, viz., the high range of temperature to which the patient is throughout the course of the disease subjected. A few instances will show you that heat of itself is injurious and may be fatal. Sunstroke, often fatal, is the direct result of the absorption of heat from without; the temperature of the body rises to a great height, and the most effectual treatment is the free application of cold water by douching. Further, animals have been killed by exposure to the sun's rays, their temperature being found to be from 110° F. to 113° F. at the moment of death. We have an instance, too, of the effect of intense heat upon the body in those comparatively rare cases of Rheumatic Fever, in which, the joint symptoms subsiding, the temperature rises quickly to 109° F., 110° F., or 111° F., delirium and coma supervene and the patient dies. Here again, cold water has occasionally averted the fatal result. But it is rarely, if ever, that the temperature behaves thus in Typhoid Fever, and though the above instances illustrate its evils when rising quickly to the height indicated, further considerations have been advanced as explaining its influence when acting for longer periods at lower levels. Firstly, in the course of a large number of diseases a peculiar condition is developed, known as the "typhoid state;" it is characterized by high temperature, quick pulse, debility, low muttering delirium, dry brown tongue, duskiness of the surface, congestion of the bases of the lung, tendency to bed-sores, &c. Now this occurs in all kinds of infectious diseases as Typhus, Typhoid Fever, Pyæmia; it also occurs in primarily local diseases as Pneumonia. No special poison has been satisfactorily demonstrated as common to all these cases, but the condition of elevated temperature is present in every one.

Moreover, the following experiment of Bartels upon the human subject shows that exposure to increasing heat will produce symptoms not unlike those of the typhoid state. Thus the following symptoms successively appeared :—sensation of heat, discomfort, anxiety and oppression, disquietude, great discomfort, exhaustion, weakness, uncertain movements, increased frequency of the beats of the heart, sighing respiration, headache, stupefaction, sensation of commencing giddiness, and finally fainting; the temperature of the body being then 107·6°.

Here then we have the great probability that much of the typhoid state is the result of high temperature; probably also, certain pathological changes common to the above mentioned febrile diseases are produced by it. We are familiar with the altered condition of the blood, with ecchymosis under the serous membranes,

with soft organs, and enlarged spleen. Liebermeister has found degenerative changes in the hepatic secreting cells, in the renal epithelium and in the muscular fibre of the heart.

But if we are right in regarding these pathological changes as the effects of heat, then also heat is the cause of more than one of the most serious complications of Typhoid Fever; in the failure of the heart alone we see the origin of hypostatic congestion of the lungs, of bed sores, of femoral thrombosis:—indirectly heat is death. On these considerations the treatment is based; there is at work in the system a process which will produce undue heat for a period of from 15 to 25 days; during this time the body will be maintained at a mean temperature far too high. May not benefit be expected by withdrawing from time to time and systematically the heat which is constantly accumulating, so that the *mean temperature of the body* may be lower by 1, 2, or 3 degrees then it would if left alone?

The following system is the one adopted, and it is being carried out (somewhat imperfectly I grant) in the case of J. S. The temperature should be taken frequently during the day at stated periods, every two or three hours; each time the thermometer reaches a certain level (102·5° F. or 103° F.), the patient should be put in a bath of from 80° F. to 90° F. and kept in ten or fifteen minutes. You observe there is considerable latitude in the directions; the more severe the fever, the more frequent should be the observations and the colder the bath. But, remember you will not stop the fever, in another five or six hours, or perhaps sooner, the temperature will again be raised, and if it passes the point you have adopted you will have again to bathe your patient. With each bath heat will of necessity be withdrawn from the body, for some short time afterwards the system will be freed from its deleterious influences and in a corresponding degree the mean height of the temperature will be lower; the total number of hours or days during which the system is exposed to an injurious heat will have been lessened.

So much for theoretical considerations. What now are the results of their practical application? This may be considered as affecting the mortality, estimated from a large number of cases, and as influencing the symptoms in individual instances. As I have said, I cannot help you with my own experience as to the first point, but I have here the published results of the use of the method in an immense number of cases observed abroad.

No doubt statistics in Typhoid Fever are troublesome things to manage. One has to remember the great difference of severity in different epidemics, and the difficulty one has in rightly discriminating between mild cases of Typhoid and mere pyrexia with or without gastric disturbance. Excluding all such slight cases, Liebermeister had from 1843-64 a mortality of 27·3 per cent., but in 1865-67, when he employed the bath, he had in 924 cases a mortality of 17·6 per cent. The respective mortality for these periods when all the cases were counted in were 18 and 13·8°. Other observers had the following percentage mortality when using the bath:—Böhm and Michel, 11·45; Scholz, 4; Riegel, 4·4; Gölz, 5·5; Merkel, 4·5; and Leube, 18·5. These are all, with one exception, lower mortalities than those given by Dr. Murchison in his Treatise on Fevers, which are for the London Fever Hospital, 1848-59, 17·26; and for many cases, british and foreign, 17·45.

With regard to the effects of the bath treatment on the symptoms themselves, Liebermeister speaks in the strongest terms. He says, "Under this method an extreme typhoid condition is rarely met with: the mental disturbances are much diminished. Dryness of the tongue, sordes on the lips, tongue, and gums are not common in those coming early under treatment. The frequency of the pulse is diminished, and high degrees of heart failure are very rare. A beneficial effect on the number of stools and the distension of the abdomen is obvious, while intestinal hæmorrhage and perforation, serious lung affections, and bed sores are much less frequent."

Other authors have given similar opinions, and though it is impossible for me to draw conclusions on the above questions from the few cases I have treated in this way, I feel sure that the bath has been in most cases markedly beneficial. The pulse has become stronger, the tongue moister and cleaner, and the patient has been roused from a drowsy apathetic delirious condition to one of comparative liveliness and decided comfort.

I have now only further to mention what may be considered to contra-indicate this treatment and what evil results have been thought to follow its employment.

Where collapse and failure of the heart have reached an extreme degree the bath may prove a severe measure, and hæmorrhage from the intestine may be increased by the greater pressure eof blood in the interior of the body when the surfac vessels are contracted by the withdrawal of heat. Bronchitis has been especially mentioned as *not* contra-indicating the use of cold, and in two of my cases tolerably severe bronchitis was not made worse by its employment.

Hæmorrhage has been again mentioned as a possible evil result of the treatment. Some observers have distinctly said it has been more frequent in the cases treated by this method; Leibermeister gives statistics which affirm the contrary. I should mention here a case recently under my care in which abundant hæmorrhage occurred.

J. G., aged 19, was admitted on March 1st, and it was ascertained with great difficulty that he had been well until five weeks previously, when he first complained of shortness of breath, giddiness, and delirium at night. Fourteen days before admission, he got worse, had to give up work, had headache, stiffness of the limbs and thirst.

On admission, he was dull, stupid, with furred tongue and sordes on the lips, and he directed attention to his chest. During the night and the next morning he got out of bed three or four times and walked to the water closet.

On March 2nd, he was more drowsy, his temperature was over 103°, and his motions were observed to be loose and yellow. There were a few rose spots on the chest and abdomen. In the evening, his temperature was 103·6°, and he was bathed at 90°; he felt cold but the reduction of temperature was not very great. He was bathed again at midnight, for a temperature of 103·4°.

On March 3rd, the bath was administered at 5 p.m., at 9 p.m., at 12 p.m. Already previous to this last bath he had passed some blood per anum, and he was not again bathed. During the night he was very restless and delirious, and large quantities of blood were passed through the next day, March 4th. In spite of this the temperature was 103·2° at 1·30, 103·7° at 7·30, and 103·9° at 10 o'clock on March 5th. At this time the pulse was feeble, 146, and the face blanched, but he took nourishment well and could be roused to talk. Though he continued to lose blood the temperature rose rapidly, being 104·5° at 2·30 p.m., 105·4° at 5 p.m., 105·7° at midnight, and 105·5° at 11 a.m., on March 6th, when he was evidently moribund, though he had passed scarcely any blood during the night. At 1·45 p.m., temperature, 107·9°; pulse, 160; respiration, 44. At 2·40 he died.

Now the first impression one would have about this case would be that the cold bathing had a good deal to do with the fatal issue; but I think there are points about it that render it very uncertain how far the hæmorrhage was the result of the bath, and how far death was the result of the hæmorrhage alone. He had been long ill before admission; the history is not very clear, but at least fourteen days if not more must have passed before he came in; then the first night of his residence he *walked* to the closet three times: possibly he had done the same several times before admission; it was only 36 hours after this that the hæmorrhage was first noticed. Further, a very severe type of fever was shown by the excessive height of temperature even after abundant loss of blood, and it is highly probable that coming thus late under observation he would under other treatment have succumbed.

Longer duration of the fever and increased number of relapses have been thought to follow this method in some epidemics. It is natural that the patient should object to the treatment; and indeed most of them do complain of feeling cold and if kept in much more than ten minutes may shiver or get a little blue in the lips and finger tips; when a patient shivers he should be removed to bed. However, adult patients will, after the first two or three baths, recognize the great relief they obtain from them. A patient whom I treated in Addison ward last year, in Dr. Pavy's absence from town, was greatly pleased with the baths and assented eagerly whenever it was proposed to give her one.

N.B.—The patient, J. S., is now (July 12th) convalescent, he was bathed eight times more during his illness.

SALICYLIC ACID AND SALICIN IN ACUTE RHEUMATISM.

Salicylic Acid has been used both in Germany and in this country in the treatment of Acute Rheumatism during the last few months, and apparently with excellent results. Salicin has also been found by some (specially by Dr. Maclagan, of Dundee) a most valuable remedy in the same disease. In the London Medical Record, June 15th, a full account was given of the cases in which this treatment was adopted; the cases recorded below, and observations quoted are extracted from that paper.

Salicin occurs in colourless prisms possessing a bitter taste and soluble in water and in alcohol. It is found in the young bark of several species of willow (salix) and poplar, whence it is obtained. Considered chemically, Salicin is a glucoside or substance yielding when decomposed, glucose together with some other compound characteristic of the substance whence it is derived, as in this case Saligenin. Its chemical formula is $C_{13}H_{18}O_7$.

Salicylic Acid is in four sided prisms, sparingly soluble in water. It occurs in the oil of the meadowsweet (Spircea Ulmaria), and in the oil of winter green (Gaultheria Procumbens) being usually obtained from the latter. It may also be formed by the oxidization of Salicin. Its formula is $C_7H_6O_3$.

Professor Traube gave Salicylic Acid in all cases of Acute Articular Rheumatism in his Wards for several months. In all there seems to be arrest of the increase of temperature within forty-eight hours, generally much sooner, and freedom from the swelling, redness and tenderness of the joints. He gave Salicylic Acid in hourly doses of from 7½ to 15 grains in a wafer washed down with water like a pill, the doses being continued until the previously affected joints could be moved without pain. The only general symptoms produced were diaphoresis, noises in the ears and difficulty of hearing, and in two cases, abnormal cheerfulness.

The following cases are related more in detail:—

1.—Rheumatic Polyarthritis. Third attack. Insufficiency of the Aortic Valves. Complete arrest of the disease in forty-eight hours.

2.—Rheumatic Polyarthritis. Cure within forty-eight hours. Recent endocarditis on admission, which remained uninfluenced by the treatment and led to slight mitral insufficiency. Pericarditis, commencing when the treatment was begun, disappeared under the continued use of Salicylic Acid.

3.—Rheumatic Polyarthritis, running a slow course with a slight rise of temperature. Whilst in the Hospital, rapid swelling and pain of several of the large joints with increase of local temperature. Cure within forty-eight hours.

4.—Rheumatic Polyarthritis. Strongly marked local affection. Cured within twenty-four hours.

5.—Rheumatic Polyarthritis—two attacks. One subdued within forty-eight hours, the other within twenty-four hours.

Rièss gave Salicylic Acid with marked success both as far as effect on the temperature was concerned and removal of the pain, swelling and stiffness of the joints. He however does not consider Salicylic Acid to be a certain remedy in Acute Rheumatism, and formulates his opinion as follows:—

Salicylic Acid acts as an excellent antipyretic in Acute Articular Rheumatism; the reduction of temperature produced is generally attended with relief of the joint affection, and it appears that in favourable cases which come early under treatment, the duration of the disease may be cut short.

Dr. Stricker gives the following as his conclusions:—

1.—Salicylic Acid appears to be a rapid and radical remedy in recent cases of genuine Acute Rheumatism of the joints.

2.—It is not injurious to the human organism when administered every hour in doses varying from 7½ to 15 grains.

3.—It can be given in these doses for a longer time to young and strong individuals than to the old and feeble.

4.—In the latter it produces toxic symptoms more readily than in the former.

5.—The toxic symptoms vary in degree.

6.—Those most commonly met with are noises in the ears,

difficulty of hearing and diaphoresis; when these occur, the medicine should be discontinued.

7.—If Salicylic Acid be found to fully answer the expectations formed regarding it, the internal administration of a certain quantity may be expected to prevent the occurrence of fresh attacks in hitherto unaffected joints, and also secondary inflammation of serous membranes, especially the endocardium.

8.—To prevent relapse, the medicine must be continued in smaller doses for some days after the termination of the main treatment.

9.—Salicylic Acid is of doubtful utility in Chronic Articular Rheumatism.

10.—It is not likely to be of use in Gonorrhœal or Diarrhœal Rheumatism, or in the Polyarthritis attending Septicœmia.

Dr. Broadbent, after treating cases of Acute Rheumatism with Salicylic Acid in St. Mary's Hospital, says in commenting on these cases: "Apparently we have in Salicylic Acid a remedy for Rheumatic Fever comparable to Quinine as a remedy for Ague. According to present experience, Rheumatic Fever when treated by this drug is an affair of two or three days."

Dr. Maclagan, of Dundee, believing Rheumatic Fever to be of malarious origin, was led to employ Salicin on account of its supposed tonic and febrifuge qualities, and the following are the conclusions at which he arrived:—

1.—We have in Salicin a valuable remedy in the treatment of Acute Rheumatism.

2.—The more acute the case, the more marked the benefit produced.

3.—In acute cases, its beneficial action is generally apparent within twenty-four, always within forty-eight hours of its administration in sufficient time.

4.—Given thus at the commencement of the attack, it seems sometimes to arrest the course of the malady as effectively as Quinine cures an ague or ipecacuanha a dysentery.

5.—The relief of pain is always one of the earliest effects produced.

6.—In acute cases relief of pain and a fall of temperature generally occur simultaneously.

7.—In subacute cases the pain is sometimes decidedly relieved before the temperature begins to fall, specially, as is frequently observed with those of nervous temperament, where the pain is proportionately greater than the abnormal rise of temperature.

8.—In Chronic Rheumatism, Salicin sometimes does good where other remedies fail, but it also sometimes fails where others do good.

The dose of Salicin is from ten to thirty grains every two, three, or four hours, according to the severity of the case. Salicin is not soluble to any useful extent, and is best administered as a powder mixed with a little cold water. It is a very pleasant bitter. Dr. Maclagan never found the least inconvenience follow its use. With respect to Salicylic Acid, Dr. Maclagan upon trying it in one case found it caused much irritation of the throat and stomach from being impure, and considers Salicin more efficacious in the treatment of Acute Rheumatism, more pleasant to take, and beneficial at a smaller dose, besides being less apt to contain noxious impurities.

Dr. Senator of Berlin found results similar to those described by Dr. Maclagan.

He believes, however, that the effect is due to the conversion of most or the whole of the Salicin into Salicylic Acid within the body. It is free from the disagreeable effects sometimes attending the use of Salicylic Acid, and may be given in powder with sugar, in wafers, or in solution.

Several cases in this Hospital have been treated by Salicin, and these, if space permits, will be recorded in the following or a subsequent number of the "Gazette."

UNITED HOSPITALS ATHLETIC SPORTS.

TENTH ANNUAL MEETING, JULY 1ST, 1876.

President: Sir William Gull, Bart., D.C.L. Hon Treasurer: A. W. May, Esq. (King's). Hon Secretary: E. Jennings, Esq. (St. George's). Starter: F. R. Cross, Esq. Judges: T. H. Morgan, Esq.; G. Bleeck Butter, Esq.

Held at Lillie-bridge on Saturday last, the tenth annual meeting for athletic sports, despite the review in Hyde-park, was very largely attended, and the complete success of the gathering is mainly due to the untiring exertions of Mr. May and Mr. Jennings, who have been well assisted by an influential committee. The members of the hospital staffs who are present increase in number each year, and they take a keen interest in the competitions, whilst many old hospital runners now in practice may be recognised, interested as much as ever in the success of their respective schools. Never has the challenge shield, however, been so decisively won. Guy's won putting the shot and both the jumps; St. Mary's scored almost its first win (Anderson won the jump in 1868) since the club was founded; and University reminded us of the days of Kelly by securing the mile with Parish. But St. George's, with most of its winning "string" of last year, took *six* first prizes. The Turners, Webb, and Jennings have had very much to do with the present prosperous athletic condition of St. George's; and Griffiths is well worthy of a place in such company. King's, which has always scored at least a couple of wins since the sports commenced, has not this year scored one; though Jefferson ran most pluckily after his half-mile struggle to retain the prestige of his hospital in the quarter mile, which it has now had to resign after holding it eight years, as was the case until last year in the 250 yards. St. George's now holds both the championship in athletics and in football.

The following are the Champion Hospitals in Athletics since the establishment of the meetings in 1867:—1867, Guy's; 1868, St. George's; 1869, King's; 1870, King's; 1871, Guy's; 1872, Guy's; 1873, St. Bartholomew's; 1874, King's; 1875, St. George's; 1876, St. George's. In Football—1875, Guy's; 1876, St. George's.

100 YARDS CHALLENGE CUP, presented by G. N. Montefiore, Esq., Guy's.—First heat: M. J. Hart, Guy's, 1; R. E. Atthill, St. Thomas's, 2; H. D. Mackay, St. George's, 0; won by a foot; time, 11 sec. Second heat: H. W. Blakeney, St. Bartholomew's, w.o. Third heat: R. P. Bond, King's, w.o. Fourth heat: H. T. Griffiths, St. George's, 1; J. E. Lane, St. Mary's 2; H. Redmayne, St. Bartholomew's, 0; won by two yards; time, 11¼ sec. Final heat: Griffiths, 1; Bond, 2; Hart, 3. Griffiths was first away and won by two yards from Bond, who beat Hart by three yards; time 10½ sec. Bond was challenged by Lane for second prize but beat him rather easily.

THROWING THE HAMMER.—J. R. W. Webb, St. George's, 85ft 2in., 1; W. G. Gray, Guy's, 75ft 6in, 2; W. Francis, University, 0. A very good performance out of the "square."

120 YARDS HURDLE RACE, ten flights.—First heat: G. R. Turner, St. George's, w.o. Second heat: J. G. Gravely, Guy's, 1; H. D. Mackay, St. George's, 2; won by ten yards; time, 19 sec. Third heat: J. E. Lane, St. Mary's, 1; J. Reader, Guy's, 2; H. P. Dimmond, St. George's, 3; won by three yards; time, 18½ sec. Final heat: Turner, 1; Gravely, 2; Lane, 3. Last year's winner taking four strides for each

hurdle won with a good deal in hand in 17 sec. Gravely was somewhat inconvenienced by picking out the same hurdle as Turner on starting, but the ultimate result was not affected by it.

ONE MILE CHALLENGE CUP, presented by Guy's Hospital.—F. Parish, University, 1; C. B. Lewis, King's, 2; L. Mabury, St. Thomas's, 3; W. S. Warlters, St. George's, 0; F. Fisher, St. George's, 0; H. P. Dimmock, St. George's, 0; H. W. Campbell, Guy's, 0; G. Fasken, Guy's, 0. Fisher led for the first lap and then stopped. Warlters, Parish, and Lewis at the half-mile post were all going very well, but a quarter of a mile from home the race was evidently between Lewis and Parish. The former led into the straight (till when he had laid absolutely last), but Parish soon headed him and won in the end somewhat easily by six yards. Mabury finished third, eight yards behind Lewis; time, 4 mins. 42 sec.

PUTTING THE SHOT—W. G. Gray, Guy's, 33ft 2in, 1; E. C. Cripps, St. Bartholomew's, 33ft ½in, 2; E. T. Power, St. Bartholomew's, 0; E. Jennings, St. George's, 0.

HALF MILE.—H. W. Yate, St. Mary's, 1; W. D. Jefferson, King's, 2; F. Parish, University, 0; V. E. Hunter, St. George's, 0; J. C. Keer, Guy's, 0; G. R. Turner, St. George's, 0. Hunter took the lead, followed by Turner, Yate lying off. The last-named gradually improved his position, and came first into the straight run in, followed some yards behind by Jefferson. A hundred yards from home the latter made his effort, but never reached Yate, who won by two yards, in 2 min. 6¾ sec.

HIGH JUMP.—V. V. Chapman, Guy's, 5ft 4in, 1; J. Reader, Guy's, 5ft 3in, 2; G. Coates, University, and J. Gravely, Guy's, 5ft 2in.

QUARTER MILE RACE.—E. Jennings, St. George's, *, 1; W. D. Jefferson, King's, *, 2; R. J. P. Wilson, St. Mary's, 3; R. J. Irvine, St. Bartholomew's, 0; J. M. Biggs, University, 0. Jefferson, who had scarcely recovered the effects of the half-mile, made a dead heat with Jennings, Wilson being close up. Time 55 sec. In running off the tie, Jennings led at a great pace, which he kept throughout. Jefferson made his effort one hundred yards from home, but failed to catch the "Secretary" who finally won by six yards. Time 55¼ sec.

LONG JUMP.—J. R. Gravely, Guy's, 19ft 7in, 1; R. E. Atthill, St. Thomas's, 18ft 4½in, 2; J. R. Davies, King's, 0; E. T. Power, St. Bartholomew's, 0.

250 YARDS RACE.—First heat: J. R. Davies, King's, 1; M. J. Hart, Guy's, 2; won easily; time, 28¾ sec. Second heat: H. T. Griffiths, St. George's, 1; J. M. Biggs, University, 2; won by a yard; time, 28 2-5th sec. Third heat: R. P. Bond, King's, 1; R. E. Atthill, St. Thomas's, 2; won easily; time, 29¼ sec. Fourth heat: R. J. P. Wilson, St. Mary's, 1; A. A. Bowlby, St. Bartholomew's, 2; won by two yards; time, 28¾ sec. Final heat: Griffiths, 1; Bond, 2; Wilson, 3; Davies, 0; won rather easily by two yards; time, 27 sec.

TWO MILES.—Cup presented by Sir W. Gull, Bart., D.C.L. E. B. Turner, St. George's, 1; F. Willcocks, King's, 2; H. W. Campbell, Guy's; L. W. Swabey, St. George's; C. B. Lewis, King's. St. George's were well represented by last year's winner and Turner, who had beaten Swabey in a private match, but King's men believed Lewis would yet make up for his defeat in the mile, or that Willcocks would give a good account of himself, while Campbell was also much fancied. Turner went away at a good pace, followed by his hospital companion, Willcocks third. The first mile was accomplished in 4 min. 58 sec. Lewis and Campbell soon retired, and Willcocks passing Swabey drew up to Turner. The latter, however, running equally strongly, and having more pace than Willcocks, never left the race in doubt, and eventually won by thirty yards. Swabey retired at the end of the fifth lap. Time, 10 min. 33 sec.

ONE MILE STRANGERS' HANDICAP.—*Handicapper*, Sydenham Dixon, Esq.—S. K. Holman, Belsize F.C., 85 yards start, 1; J. Bright, Trojan F.C., 135 yards, 2; J. A. Voelcker, University College A.C., 180 ysrds, 3; *69 entries, 42 started.* Holman who was only fifteen yards from the virtual scratch man in the handicap, and who was behind all the starters, gradually threaded his way through the other forty-one competitors, and coming with a rush deprived Voelcker of the lead forty yards from home, winning by three yards. Time, 4 min. 19¾ sec.

300 YARDS CONSOLATION RACE.—J. R. Davies, King's.

After a speech by the President, Lady Gull presented the prizes; first the Inter-Hospital Football Cup to the St. George's team; then the individual prizes to the winners at the athletic sports, and finally the Challenge Shield to St. George's Hospital.

About fifty members of the different Hospital Sports' Clubs dined together in the evening, under the presidency of Dr. Sieveking, whose kindness in taking the chair was well appreciated by the students, as was also the presence of the vice-presidents who honoured the dinner. The Chairman, after the usual loyal toasts, gave "The United Hospitals Athletic Club," for which Mr. May (King's) returned thanks; "The Inter-Hospital Football Club," which was replied to by *Mr. Collins (St. George's); while Mr. John Wood, F.R.S.,* retuned thanks, for "The Vice-Presidents and Visitors." "The Executive," "Champion Hospital," and other toasts followed.

ON DUTY FOR JULY.

House Physicians:—Messrs. J. W. TYSON & H. F. LANCASTER.

Junior House Physicians:—Mr. C. J. SYMONDS.

House Surgeon:—Mr. R. E. CARRINGTON.

Junior House Surgeon:—Mr. E. AMPHLETT.

Senior Resident Obstetric:—Mr. J. W. BULL.

Junior Resident Obstetric:—Mr. M. LUBBOCK.

RESIDENT DRESSERS.

For the weeks commencing:—

July 5th, Mr. WILKINSON (Mr. Howse.)

„ 12th, Mr. RICHARDSON (Mr. C. Forster.)

„ 19th, Mr. PEDLEY (Mr. Bryant.)

„ 26th, Mr. INSTONE (Mr. Durham.)

SPECIAL OPERATION DAYS AND DEMONSTRATIONS.

Monday ...	9 a.m., St. Mark's Hospital for Fistula.
	2 p.m., Metropolitan Free. British Skin. Diseases of Nervous System. St. Mark's.
	3 p.m., London Temperance Hospital. St. Peter's.
Tuesday ...	1·30 p.m., Guy's.
	2 p.m., Westminster. National Orthopædic. Royal Free.
	3 p.m., West London. Chelsea Hospital for Women.
Wednesday	1 p.m., Middlesex.
	1·30 p.m., St. Bartholomew's. St. Mary's. St. Thomas.
	2 p.m., University College, London. Great Northern. King's College.
	2·30 p.m., Samaritan Free Hospital.
	3 p.m., Cancer (Brompton).
Thursday	1 p.m., St. George's Central London Opthalmic.
	2 p.m., Hospital for Diseases of Throat. Royal Orthopædic. Hospital for Women.
Friday ...	1·15 p.m., St. George's (Ophth. Dept.)
	1·30 p.m., Guy's.
	2 p.m., South London Ophthalmic. Central London Ophthalmic.
	3 p.m., Chelsea Hospital for Women.
Saturday...	9·30 a.m., St. Thomas.
	1·30 p.m., St. Bartholomew's. King's. St. Thomas.
	2 p.m., Charing Cross. East London for Children. Royal Free.

Correspondence.

GUY'S HOSPITAL,
July 3rd, 1876.

TO THE EDITOR.

SIR,

In your next issue will you kindly inform me whether or not in your opinion it is good for a young medical man to go into the Navy?

I am, SIR,
Your obedient servant,
INQUIRER.

[We trust some of our readers will try to inform our correspondent upon the above subject, which is one of considerable importance just now, in view of what is considered adequate remuneration to doubly qualified gentlemen in Civil practice.—ED.]

ROYAL COLLEGE OF SURGEONS.

The following Gentlemen passed the final examination for the Membership on the 16th, 17th and 18th ultimo.

Mr. F. C. Coley, Blackheath; Mr. W. D. Stamp, Honiton, Devon; Mr. J. P. Welchman, Litchfield; Mr. C. G. Lee, Chester; Mr. W. P. Turner, L.S.A., Stamford, Hythe; Mr. David Walker, Emsworth, Herts; Mr. C. F. Pickering, Exeter; Mr. C. A. J. Barrow, Woolwich.

SAVORY & MOORE'S

SPECIAL PREPARATIONS.

GENUINE PANCREATIC EMULSION AND PANCREATINE. Administered in Diseases where Wasting, Loss of the Power of Digestion and Assimilation are prominent symptoms.

BEST FOOD FOR INFANTS. Resembles Mother's Milk more closely than any other kind of Food, perfectly fulfilling its object, that of promoting the GROWTH and HEALTH of the Child.

DATURA TATULA. For the Relief of Asthma and Chronic Bronchitis. Prepared in all forms for Smoking and Inhalation.

TINCTURE OF GELSEMINUM. Prescribed for Neuralgia, Toothache, &c.
Vide DR. SPENCER THOMPSON'S Paper, "On the Rapid Relief of Neuralgic Pain" in *Lancet*, Nov. 6, 1875.

PEPTODYN combines the active principles of the Digestive Secretions and effects the Digestion and Assimilation of the various kinds of Food, the Farinaceous, Fibrinous and Oleaginous.

PEPSINA PORCI AND **PEPSINE WINE.** } Best Quality. Supplied in small bottles or in bulk. On account of their large manufacture of Pancreatic Preparations, Messrs. SAVORY & MOORE are enabled to offer them (in quantity) at lower rates.

MEDICATED GELATINE DISCS (Patent) For Opthalmic and Hypodermic use.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

JOHN B. MEDLAND,

MICROSCOPE & SCIENTIFIC INSTRUMENT MAKER.

MEDLAND'S STUDENTS' MICROSCOPE, COMPLETE £3.

An excellent Working Instrument.

EVERY DESCRIPTION OF APPARATUS FOR MICROSCOPICAL PURPOSES, MOUNTING FLUIDS, GLASS SLIPS CELLS, THIN GLASS COVERS, &c., &c.

CLINICAL THERMOMETERS from 7/6. URINOMETERS from 3/6.

Photographs of Guy's Hospital, Portraits of Guy's Medical Staff, Eminent Medical Men, &c., &c.

10a, BOROUGH, LONDON BRIDGE

(CLOSE TO THE RAILWAY ARCH).

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine, and Surgery.

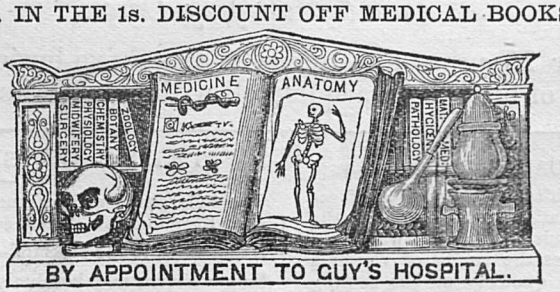
NEW SERIES.—No. 8. AUGUST, 1876. SIXPENCE.

CONTENTS.

Clinical Lecture on Leucocythæmia 87
Notes of a Clinical Lecture 89
Electrifying Room 90
Leading Article 92
Notes of the Month 92
Mental Diseases 93
The Artificial Production of Organic Compounds ... 94
Royal College of Surgeons 95
The Gold Medals... 95
Statistical Report... 95
Guy's Hospital v. Tooting Wanderers 95
Faith 96
Specialists and Specialism 98
Correspondence 98

3d. IN THE 1s. DISCOUNT OFF MEDICAL BOOKS.

NOTE BOOK FOR EXPERIMENTS IN ANALYTICAL CHEMISTRY, 2s.



NOW READY.

Mr. BRYANT'S NEW SURGERY,

2 VOLS., 19s.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

BOOKS BOUGHT OR TAKEN IN EXCHANGE.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

A SEASONABLE CAUTION.

"In his last health report, Dr. Whitmore, the medical officer for Marylebone, counsels discrimination in the choice of the ice now so generally used for mixing with light wines and other summer drinks. He endorses the purity of Wenham Lake Ice, but states that a large quantity of the cooling material is sold derived from more objectionable sources. Some of this ice when melted is found to contain a considerable amount of sediment apparently of vegetable origin, and it would be advisable always to test the purity of doubtful ice, by dissolving a small portion in a wine glass, and rejecting its use if the water be not clear and bright."—*San. Record.*

TERMS OF SUBSCRIPTION.

The "Gazette" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to MONTAGU LUBBOCK, Esq., Guy's Hospital ,to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Lecture

By DR. TAYLOR.

LEUCOCYTHÆMIA.

E. D. æt. 12 years, admitted into Clinical Ward June 26, 1876.

The family history did not bear upon the case.

Six weeks ago she was said to be quite well, but about that time had an ulcerated sore throat and swelling on right side of neck which gradually increased in size. She became very drowsy, and had general malaise with loss of health and strength.

On June 26th, she came as an out-patient under Dr. TAYLOR, and was at once sent into the Hospital. Dr. TAYLOR recognizing it as a case of Leucocythæmia.

On admission.—The patient is pale and waxy looking. The glands in the axillæ and groins are distinctly felt and slightly enlarged. At the angle of the right jaw is a swelling about the size of a filbert nut and freely moveable, and there is slight enlargement of the sub-maxillary and sub-lingual glands on both sides. The swellings are tender on the right side; but there is no further evidence of suppuration, no redness nor adhesion of the skin. Tongue furred and moist, breath offensive. The gums are thick, pale, and india-rubber like; not spongy, but firm, dense, and fibrous. The teeth are loose and buried in the gums. There are several small sloughy patches on buccal surface of gums. Tonsils very much swollen. Voice thick and husky. Chest normal. Doubtful systolic murmur at the apex of the heart.

The patient is very thirsty and craves for water; she has been slightly sick. Urine slightly milky in appearance, sp. gr. 1002; no albumen. Temperature, 103·3°; respiration, 17; pulse, 140, firm.

Under the microscope, the blood presented a great excess of white corpuscles; when the red corpuscles were aggregated into rouleaux, the white appeared to occupy about half the field of view, but certainly did not equal the red in number on account of their looser arrangement. Their size was very variable, and the larger number contained one or two comparatively small nuclei, one-half or one-third the diameter of the cell.

Liver dulness normal. Spleen rather enlarged, dulness reaching from about 7th rib to just below margin of thorax, the edge descending one or two inches on inspiration.

June 27.—Amount of urine passed in last twelve hours, 162 ozs., sp. gr. 1001. Temperature, 103°; pulse, 150; respiration, 22. Milk and beef tea, ℞ Acid, Phos. Dil. ʒ iij. Aqua Oj. Pro. potu. Chloral Hyd. gr. x. Syr. Tolu ʒ j. statim. Evening temperature, 102·8°; pulse, 144; respiration, 22.

June 28.—Morning temperature, 101·4°; pulse, 136; respiration, 20. Is very restless; complains of gums, and of pain in the splenic region; glands of the left side of the neck more swollen. Has passed 240 ozs. of urine in the last 24 hours. Drank 15 pints of fluid in the last 12 hours. Evening temperature, 102·5°; pulse, 144; respiration, 22. Complains of pain over the right side of face, under the jaw and in the mouth. Breathing obstructed by tonsils.

June 29.—Was very restless and troublesome until 4·30 a.m., when she was given a draught containing Lig. Morph. ♏ vij. Chloral Hyd. gr. x. At 9·30, washed and had some wine and water; made a peculiar noise in breathing and frequently held her breath for a long time after a deep inspiration; died at 10·55 a.m.

P.M. made 3½ hours after death. Brain and lungs healthy; heart healthy, but for a few spots of ecchymosis about pericardium; gums swollen; tonsils enlarged: the follicles at the base of the tongue much enlarged, almost the size of peas. Stomach mammillated, mucous membrane thickened owing apparently to excessive development of the glandular apparatus. In the duodenum the solitary glands were enlarged and standing out among the valvula conniventes; the remaining portion of the intestine, small and large, was unfortunately lost. The spleen weighed 16 ozs., but showed nothing remarkable besides. Kidneys and liver healthy.

Leucocythæmia is a condition of the blood in which the white corpuscles are in considerable excess of the normal proportion; sometimes they equal the red corpuscles in number, but more generally do not exceed the proportion of one white to two or three red corpuscles. When examined microscopically the red corpuscles are found collected together in rouleaux, which again are arranged in the form of an open network; filling up the spaces so formed are the white corpuscles to the number of 200 or 300 in a field.

In the above case, which was not altogether typical, the spleen was not greatly enlarged; but she had the following conditions which led to a suspicion of her disease, and suggested an examination of her blood:—enlargement of the spleen, of the lymphatic glands, and of the tonsils; new growth in the gums, apparently not inflammatory, and pallor and debility not easily explained.

When Leucocythæmia was first noticed, a case was described by Dr. HUGHES BENNETT as suppuration of the blood without inflammation, but VIRCHOW showed that they were white blood corpuscles and that with this condition the spleen was invariably enlarged; and to the disease he gave the name Leucæmia. Subsequently, Dr. HUGHES BENNETT on examining other cases came to the same conclusion and gave it the name of Leucocythæmia.

The spleen attains a very large size, and in typical cases may occupy the whole of the left half of the abdomen extending beyond the middle line at the lower part, and presenting one or more notches in its

right border. One or more of the other organs may be at the same time affected; the liver is often enlarged, the cervical, inguinal, bronchial, mediastinal or mesenteric glands hypertrophied; and as the enlargement of these glands is sometimes present with little or no hypertrophy of the spleen, physicians have made a division into two forms, Lymphatic and Splenic Leucæmia.

More recently it has been discovered in a few cases that the marrow of certain bones may be affected; it was found to be converted into a material, very much like pus, which contained numbers of corpuscles, differing from both red and white, and clearly in stages of transition between the two.

A few rare cases have been described in which enlargement of Peyer's patches were found, so that we see in all cases that Leucæmia is associated either primarily or secondarily with a disease of the blood-forming organs.

If the bone is the only tissue at fault the disease is called *Myclogenous* Leucæmia.

In some extreme cases new growths having the structure of lymph-adenoma are found in various parts of the body, their microscopic characters corresponding closely with those of the tissues of lymphatic glands, presenting a network of finer or coarser fibrils, in the meshes of which are lymphoid corpuscles. They arise in two ways; firstly, spreading from existing glands and involving the neighbouring structures; secondly, as independent tumours in situations unconnected with glands, as under the pleura, pericardium or peritoneum.

We supposed that the increased size of the gums was due to this tissue, but on post-mortem this was not borne out.

Nothing is definitely known of the causation of this disease. I have seen it stated that it rarely affects young people, but this has not been supported by facts I have recently observed in this hospital.

It is extremely insidious in its commencement; in this case the girl gives a history of six weeks illness, but it cannot be said for how long before the disease had been coming on. One is not able to get at its cause, because the disease is so very slow in its growth, and the patient often does not complain until the spleen is fully enlarged.

As the disease progresses the patients generally become pale, but the flush of fever may mask for some time the paleness. The evening temperature is raised a degree or two higher than normal, the morning temperature is generally not much above normal. At the most the fever is only moderate, until the termination, when hectic may set in.

Many of the symptoms and complications very much resemble those of Bright's disease, thus:—there may be swelling of the feet, dropsy of the serous membrane, hæmorrhage such as epistaxis, and purpuric patches; and inflammation of the retina with degeneration of its structure and hæmorrhage into its substance has been observed, similar to that seen in chronic Bright's disease.

This patient complained of great thirst and passed very large quantities of urine, symptoms which are not generally observed in cases of Leucocythæmia.

Leucocythæmia is not difficult of diagnosis. If a very large spleen is recognized always examine the blood for excess of white corpuscles, for if found the diagnosis is certain. In an ordinary case there may be about 200 or 300 in a $\frac{1}{5}$ inch field.

The spleen in ague is rarely enlarged to such an extent as in an advanced case of leucæmia. Enlarged spleen has been mistaken for ovarian tumour.

The enlargement of the spleen due to lardaceous disease is not usually so extensive as that of leucæmia, and in the case of lardaceous disease a history of chronic suppuration or syphilis or phthisis would no doubt be obtainable. Dr. Hodgkin long ago described certain cases, which came under his notice, of great enlargement of the absorbent glands, generally with a peculiar deposit in the spleen. In this affection, there is no inflammation or suppuration of the glands, the skin over them is normal and evidently they are not strumous or scrofulous.

Dr. Wilks more recently collected several similar cases in which there were deposits in other organs; namely, the liver, the lungs and the kidneys; in all these cases there was no excess of the white corpuscles in the blood.

In Hodgkin's disease also, lymph-adenomatous deposit may be found under the serous membranes and elsewhere. So that this disease and leucæmia come to resemble each other very closely, both tending to hypertrophy of lymphatic and other ductless glands, and to the formation of adenomatous growths in various organs and tissues. However, as compared with Leucocythæmia, the typical case of Hodgkin's disease is more chronic, the glands are much larger, often forming great tumours in the neck and axilla, while the spleen is relatively small, but presents white or yellowish patches scattered through its substance.

Treatment has hitherto done little for this disease. Some cases come into the hospital and go out better but not well, others die rapidly. No drugs have any permanent effect upon the disease. Phosphorus has lately had a trial.

Mr. Bryant has twice removed the spleen. Both cases, however, died very shortly after the operation.

Another method of treatment has been advocated; namely, transfusion. In a case treated at St. Bartholomew's hospital, only temporary benefit was obtained; but Mosler, a German Author, speaks of it as likely to give good results if employed periodically for a long time. In the present condition of our knowledge there is no certain cure.

NOTES OF A

Clinical Lecture

BY C. H. GOLDING-BIRD,

ON THE USE OF ELECTRICITY IN SURGERY, AND SPECIALLY OF THE CONTINUOUS CURRENT AS A CAUSTIC.

The discovery of electricity is due to Thales, 600 B.C., who found that by rubbing a piece of amber with silk it acquired the property of attracting light bodies, and this may be looked upon as the origin of static electricity.

Dynamic electricity may be said to have originated accidentally. It is said that the wife of Galvani had been ordered, whilst ill, to take frog soup. The frogs having been procured, were suspended by hooks of copper to the iron railings of a balcony. It happened to be windy, and the legs of the frogs being blown against the iron bars, were seen to contract whenever the iron bar was touched. This was believed by Galvani to be due to animal electricity existing in the frog. Volta denied this, asserting that the contractions were due to the contact of the two metals with moisture between, as has since been shown to be the case.

Chemical action goes on at the same time at the expense of the more oxidizable metal. Thus, supposing a piece of zinc and silver connected by a wire to be suspended in dilute sulphuric acid, what takes place is as follows:—the zinc is attacked by sulphuric acid, zinc sulphate is formed, and hydrogen liberated, and the hydrogen gas is seen to bubble up from the silver. A piece of flesh which may be looked upon as a solution of sodium chloride may be taken instead of sulphuric acid. The chlorine then unites with the zinc, forming zinc chloride; while the sodium, liberated close to the silver, is at once converted into soda by the decomposition of an atom of water. An electric current at the same time passes from the zinc to the silver, and may be recognised by the saline taste that the wires coming from the two metals give rise to when applied to the tongue, and if the current is strong enough, by the spasmodic action of the muscular fibres of the organ felt to occur.

If for the piece of flesh we substitute a part of the living body the same change occurs. The chlorine of the chloride of sodium attacks the zinc, chloride of zinc is formed, which acts as a caustic and destroys all that it comes in contact with, and this is the estimate of the treatment adopted in enlarged lymphatic glands.

For the strumous or scrofulous diathesis enlargement of the glands is under certain circumstances found to occur, without any increase having taken place in the number of white corpuscles in the blood, as in Leucocythæmia, and different from the more general enlargement which occurs in Hodgkin's disease. This scrofulous enlargement is seen most commonly in children, the glands becoming enlarged, hard, and moveable. After a time the glands become fixed, adherent to the skin and soften in the middle; the distended skin reddens and a small opening forms, through which the softened portion of the gland slowly passes. Resolution now rarely takes place, the unhealthy suppuration becomes chronic, and enucleation or destruction are the sole modes of treatment to be considered. Dissecting the glands out is not advisable treatment and caustics are usually considered preferable.

The cause of enlargement of the glands is ascribed to the existence of a scrofulous diathesis, but some exciting cause probably may be found, such as a decayed tooth or other source of irritation, and over use of the part whence the gland receives lymph seems often the cause. Thus, walking will occasionally produce enlargement of the glands in the groin, or carrying heavy baskets on the head that of the glands at the back of the neck.

Since this affection usually occurs in children a long and painful form of treatment must be avoided. In France chloride of zinc arrows are used, that is a mixture of zinc chloride and plaster of Paris made up in the shape of an arrow, and these are thrust into the gland through an opening made with the bistoury. The pain caused by their application is agonising for two or three days, but the final result is good.

Chloride of zinc may, however, by means of the electric current be made to act in a painless manner. This may be managed by thrusting into the gland, through a pre-existing opening, or through one made with the bistoury, a piece of flattened zinc wire; to this is attached a piece of copper wire at the other extremity of which is a slip of silver foil, which must be strapped to a raw or blistered surface in the neighbourhood. A battery is thus formed, the fluid of the body being the exciting liquid, and zinc chloride is formed by the decomposition of the sodium chloride in the liquid and the combination of the chlorine with the zinc. But owing to the action of the caustic in its nascent condition, its development is unattended with pain for this reason, and because the apparatus employed is but small the patient, if an adult, can continue his work during the process of treatment.

J. D., æt. 24, first seen in 1873, with moveable enlarged lymphatic gland under jaw. Absorbent applications were employed and tonics administered, but it continued to enlarge until six months from the present time, when it broke and the reddish-colored gland partly protruded. From time to time the Ung. Hydrarg. Oxidi Rub. and Ung. Iodoformi were tried, but without any result. Things continued thus until—

8th May, 1876. A flattened zinc wire was thrust into the gland, then a small shield of thick gutta-percha, and strapped in position; a silver plate connected by copper wire with the zinc was fastened to a previously blistered surface at angle of jaw. No pain was given.

A second gland was to-day felt lying deeper than the one protruding.

10th.—Zinc removed. The red gland was converted into a grey dry mass. Ordered poultices.

15th.—Gland fell out on poultice; the second gland was now visible. Water dressing.

22nd.—Opening rather smaller.

12th June.—Opening closed, the second gland felt under the skin, to cease attending but to return if the second gland enlarge.

The application of chloride of zinc would have been followed by the same result; but, after causing most intense pain, whilst its constant formation at the zinc points has the same caustic effect and is attended with but slight inconvenience. Some thickness (probably inflammatory) may remain after the glands have come out, but this gradually ceases to exist.

A case at present in the Hospital, in Charity Ward, 6, was treated in a similar way by Mr. BRETT.

J. R., æt. 16, is one of a family of three, all delicate.

Patient is a girl who for four years has been suffering from enlarged glands on the right side of the neck at angle of lower jaw. Two years ago these were lanced, discharging freely, the wound healing about twelve months after the incision was made.

She was admitted into the Hospital on May 3rd, presenting a large mass of enlarged glands on the right side of the neck, nodular, deeply seated, but freely moveable over the deeper structures, though adherent to the skin.

On May 13th, a small blister was applied close to the right ear, and on the following day the silver plate was applied to the blistered surface, while two zinc points were thrust into the mass of glands through two small openings made with a bistoury, the part in contact with the skin being protected by the application of sealing-wax (non-conductor).

On May 20th, three glands fell out in the poultice. The zinc points were re-applied on May 22nd, and between the 26th and 27th five glands fell out. Between that date and the present time two more applications have been made and three glands have come away. This patient is still under treatment.

Owing to the insulation of the zinc wires being imperfect the skin was destroyed for some distance round. This is the only case in which such an accident has occurred,

Mr. GOLDING-BIRD mentioned other cases, but they were all illustrative of the same method of treatment, and the result in each was satisfactory.

It is an undoubted fact that the continuous electric current may be used as a caustic, and that it acts as such without giving rise to pain. It is this action that will be considered now, and especially in relation to the treatment of scrofulous glands, which may be thus caused to slough without pain and to come away instead of remaining indolent for years, as might otherwise be the case.

The continuous current has also been employed for other purposes, and the effects it produces will depend either (1) upon its action on the nerves,—upon, in other words, the stimulating effect of the electric current; or (2) upon its secondary or electrolytic action.

Whether acting in either of the above ways, or in both united, its uses, surgically, may be classed under—(1) Destructive, *e.g.*, (I.) electric cautery; (II.) electric caustic. (2) Constructive or stimulating, *e.g.*, application to ulcers. (3) Its alterative or absorbent, *e.g.*, nævi, aneurism, cystic and solid tumours, hydatid.

(To be continued.)

Electrifying Room.

REPORT ON CASES TREATED IN THE ELECTRIFYING ROOM, FROM 1864 TO 1875 INCLUSIVE.

By R. J. PYE-SMITH and J. SANDY.

(Concluded from page 69.)

In concluding the present Report the following summary has been drawn up in order to show in a tabular form the results of treatment.

Name of Disease.	Reported	Cured	Im-proved	Not im-proved
Hemiplegia	60	1	29	30
Paraplegia	17	0	8	9
Paralysis of muscles of face ...	10	4	4	2
Do. of orbit	8	2	3	3
Do. of upper extremity ...	60	28	22	10
Do. of lower extremity ...	10	2	5	3
Lead Palsy...	37	14	20	3
Infantile paralysis	23	1	17	5
Paralysis agitans	12	0	6	6
Progressive muscular atrophy ...	11	0	9	2
Locomotor ataxia...	25	0	17	8
Chorea	29	25	2	2
Scrivener's cramp...	3	1	1	1
Sciatica	18	8	8	2
Facial neuralgia	3	1	1	1
Aphonia	9	5	1	3
Amaurosis	18	0	5	13
Deafness	10	0	2	8
Amenorrhœa	14	4	1	9
Hysteria	7	4	2	1
Rheumatism	16	0	14	2
	400	100	177	123

In estimating the results of treatment it should be borne in mind on the one hand that most of the above cases were selected, by the Physcians or Surgeons under whose care they were, as suitable cases of their kind for treatment by Electricity (we could not, for instance, expect to cure 4 out of *any* 7 cases of Hysteria); on the other hand it must also be remembered that in some cases (notably in Amenorrhœa, Amaurosis, and Deafness) the electrical treatment is the last resort after other means of cure have failed.

Several classifications—each more or less useful—might be made of the above diseases; considered from a therapeutical point of view the following is perhaps as good as any :—

I.—Some diseases are capable of being cured by the application of Electricity in one or other of its forms, and when not cured are generally improved.

1.—LEAD PALSY

Is perhaps the most important of all. Over 90 per cent. of the cases treated were improved by the application of the Galvanic (or in some cases the Faradic) current to the affected

muscles of the forearms on alternate days for about two months, and nearly 40 per cent. were so far improved as to be cured.

2.—PERIPHERAL PARALYSIS IN THE UPPER EXTREMITIES,

Caused chiefly by injuries of various sorts, gives over 80 per cent. of improvements, including 45 per cent. of cures, when treated by either Faradism or Galvanism.

3.—CHOREA

Under any of the usual methods of applying Electricity furnishes the large proportion of 90 per cent. of improvements, including no less than 85 per cent. of cures; and, although this is not probably a larger proportion than may be claimed for other methods of treatment, many of those electrified had already been treated in other ways without benefit.

4.—SCIATICA

Is very amenable to the Galvanic current, the proportion of improvements being nearly 90 per cent., half the number being cures.

5.—FACIAL PALSY,

Which often gets well of itself, generally improved under the use of Galvanism or Faradism; 80 per cent. being improved and 40 per cent. cured.

6.—INFANTILE PARALYSIS,

Treated for some months by Galvanism or by Faradism (or both), although it yields under 5 per cent. of cures, yet gives 75 per cent. of improvements, and it seems probable that the proportion of cures would be greater if the cases were brought earlier for treatment.

7.—FUNCTIONAL APHONIA

In young women may be cured by any of the varieties of Electricity, but especially by local Faradism; yielding over 60 per cent. of improvements, most of them being cures.

8.—HYSTERIA

In other forms seems to give equally good results under similar treatment.

9.—WRITER'S CRAMP

(Scrivener's Palsy) deserves a place in this class, being curable by the systematic use of Galvanism to the supplying nerves during exercise of the affected muscles.

10.—PARALYSIS OF OCULAR MUSCLES,

Which usually subsides under Iodide of Potassium or Quinine, may get well more quickly with the aid of Faradism or Galvanism, though the percentage of improvements here was but 60, the cures being 25 per cent.

11.—PERIPHERAL PARALYSIS IN THE LOWER EXTREMITIES

Is often cured by Faradism, the proportion improved being 70 per cent. and cured 50 per cent.

12.—FACIAL NEURALGIA

Again may often be cured by Galvanism, but our numbers are too small to give us a trustworthy percentage.

13.—AMENORRHŒA

Is also remediable by any form of Electricity, and in former times was frequently cured by Franklinism. The foregoing table shows somewhat less than 30 per cent. of cures.

14. The occasional joint stiffness after true *Rheumatism* should probably be included in this class although the table shows no cures but 90 per cent. of improvements.

II.—Other diseases are scarcely capable of cure but may be improved up to a certain point by the use of Electricity.

1.—HEMIPLEGIA

Is benefited to a greater or less extent in the proportion of 50 per cent., whether the Faradic or the Galvanic current is used.

2.—PARAPLEGIA

Receives some relief in 40 per cent. of the cases treated, the incontinence of urine, when present, often being cured. Galvanism to the spine is the most frequently successful mode of application.

3.—AMAUROSIS

With a healthy retina gives 25 per cent. of improvements under Galvanism.

4.—NERVE DEAFNESS

Also furnishes 20 per cent. of improvements under the same treatment.

III.—Other cases again can be neither cured nor permanently improved by Electricity, but their symptoms may be for a time relieved and the progress of the disease apparently checked.

1.—PROGRESSIVE MUSCULAR ATROPHY

Is, in this class, the disease which seems to be most frequently, though but slightly, benefited; 80 per cent. of the cases treated receiving some benefit, usually from Galvanism to the spine.

2.—LOCOMOTOR ATAXY

Is relieved by Galvanism to the spine in about 60 per cent. of the cases treated, and the patients frequently say that they feel immensely better immediately after the application.

3.—PARALYSIS AGITANS

Treated by Galvanism continuously applied to the spine for some hours, or otherwise, gives 50 per cent. of improvements.

With regard to the important question as to whether Electrical treatment does harm in some cases (apparently well selected) where it fails to do good, we may state that only two instances of the patient seeming to be made worse by the treatment are recorded; one was a case of Paralysis Agitans and the other a case of Amblyopia with unhealthy retina.

A few cases (Paraplegia, Bright's Disease, &c.) died whilst under treatment, but there was no evidence that Electricity in any case accelerated the fatal termination. In no case has pain been known to be aggravated by the Electrical treatment; as a rule a single application of Galvanism affords marked relief not only in Sciatica and Neuralgia but also in the pains associated with Paraplegia, Locomotor Ataxy, and other conditions; indeed the relief afforded in cases where pain is a prominent or the only symptom constitutes one of the chief uses of medical Electricity.

The Report which we have now brought to a close is, we are perfectly well aware, very far from presenting a complete epitome of Electro-therapeutics. The published works of other observers will help greatly towards the accumulation of sufficient data to form a satisfactory groundwork of facts; but it is, we feel confident, to the careful observation and record of cases in fields so large as the one afforded by the Electrical Department of Guy's that we may look with the greatest hope for more extended and exact information on a subject which, if not investigated and tested by honest and educated observers, must stand a great chance of falling into the hands of quacks. Whilst the regular or even occasional visit of a Clinical Clerk to the Electrifying Room would be of the utmost service to those constantly engaged there, it would offer to the visitor a substantial return in much interesting information and useful instruction in the more practical part of the work, and might produce a directly beneficial result to many of the patients who are there treated, The recorded observations of ADDISON, GOLDING-BIRD, and GULL, as well as of some members of our present staff, are surely such as to make it an honour worth seeking to follow in their path; and those whose position gives them the power to help would, we venture to think, be doing a worthy deed by endeavouring to organize a more efficient arrangement for making full use of the material so constantly supplied to the Electrifying Room from our numerous Out-Patient Departments.

GUY'S HOSPITAL GAZETTE, *AUGUST*, 1876.

WE are very glad to be able to announce that two new prizes and a scholarship have been bequeathed to the Hospital by the gentlemen whose names they bear respectively, and will be awarded as follows:—

For Students of the second year the

MICHAEL HARRIS PRIZE, of the value of £10.

Subject:—Human Anatomy, including Minute Anatomy.

AND THE

SANDS COX SCHOLARSHIP, of the value of £15, tenable for three years by a Student of the Hospital for the time being.

Subjects:—1. Physiology, including Practical Physiology and Histology, and Physiological Chemistry.

2. Elementary Physics.

FOR STUDENTS OF THE FOURTH AND FIFTH YEARS.

GURNEY HOARE PRIZE, of the value of £25, for the best Reports of six Medical and Six Surgical cases, with a commentary upon each.

We believe that these prizes, which are most opportune, will become very popular and well-contested, the last especially, which has the great advantage of being entirely novel.

Competitors for this, the GURNEY HOARE Prize, must present their Reports to the Dean on or before the first day of October in each year; on account, however, of the lateness of the announcement, this year's Reports need not be sent in until January 1st, 1877.

NOTES OF THE MONTH.

According to the *Philadelphia Medical Times*, the suffering consequent on the use of the actual cautery may be completely relieved by the local applicalion of pure carbolic acid. The crystals are deliquesced by heat, and the liquid brushed gently over the wounded part, while the patient is yet under the influence of the anæsthetic. The results are said to be entirely satisfactory.

Silkworms hatched by electricity, according to the *Live-Stock Journal and Fanciers' Gazette*, are now being reared in Italy. The superintendent of the Italian Experimental Silkworm Farm at Padua, has found that the hatching of silkworms may be accelerated by ten or twelve days and a yield of 40 per cent. of caterpillars secured, by exposing the eggs to a current of negative electricity from a "Holtz" machine for eight or ten minutes. It is suggested to apply the method to seeds and to hens' eggs. Henceforward the place of the sitting hen will be a sinecure; not to mention results more startling still.

There are now sixty-three female students in Switzerland, twenty at Paris, and one in Italy. The last is a Russian and bears the fascinating name of Pepper. Of the students in Switzerland thirty-nine are Russians, eight are Americans, five are Austrians, four are Germans, three are Servians, one is French, and, we are happy to say, but one is English.

Japan has done at length with dreaming, and is now taking energetic measures to be considered among the nations as "*un peuple qui se civilise.*" One of these is, perforce, the institution of cremation, and accordingly we find that furnaces for the purpose are in course of erection at Osaka.

The Correspondent of a "highly respectable" and eke readable American contemporary speaks of a time-honoured drug in this wise, "It is to be hoped that the concentrated intelligence of the Academy will in a short time *decapitate the tottering therapeutic reputation of that worthless drug, Secale Cornutum.*" Has Mr. Jefferson Brick taken to medical instead of political journalism?

The medical survivors of Waterloo are now reduced to two, viz., Surgeon-Major T. Smith, M.D. (Assistant-Surgeon 23rd Regiment), and Surgeon F. Yelder (Coldstream Guards).

DEATH.

On the 26th ultimo, HENRY LAWRENCE CHAMPNEYS, æt. 22 years. Our fellow-student had been yachting for a few days off the Isle of Wight, when he was taken suddenly ill with abdominal symptoms, and died on shore at Cowes.

We shall notice this sad event more fully in our next issue.

Mental Diseases.

BY DR. G. A. SAVAGE, OF BETHLEHEM HOSPITAL.

NOTES ON LECTURE II.

CAUSES OF INSANITY.

We must begin by saying that the causes given by friends are rarely trustworthy. First, symptoms of insanity are often set down as the causes of subsequent acts. Thus rash speculations and money losses often occur as part of general paralysis, or a fall may be given as a *cause*, whereas the fall was the result of paralysis preceding mental symptoms. Foolish marriages again are not uncommon in early insanity which must not be set down to marriage. We more commonly have a difficulty in deciding on the relation of intemperance in drink as a cause of insanity, for though it is true that drink sends some patients into an asylum, a great many drink because of their insanity, either to produce sleep, relieve despondency, or to satisfy some morbid feeling or craving.

We shall consider the causes of insanity under various heads:—First as to their origin we may have the so-called (1) Idiopathic causes, in which the brain is directly affected as in sudden fright, injury, or by use of narcotics. (2) We may have the mental symptoms consecutive to other diseased states that favour either hyperæmia, or more commonly, anæmia; again reflex, or more properly, conducted irritation may be a cause as in exhaustion from sexual excess, or perhaps in some cases from prolonged irritation of the peripheral nerve. It has been said that irritation of the dental nerve has set up general paralysis; the presence of a dyscrasia may act as a cause. I have seen cases of insanity due both to syphilis and to ague, and cured by treatment of the disease.

It is convenient to consider the causes as predisposing and exciting, but it is often difficult to draw a distinction. In many cases it is the accumulation of one or two exciting causes on several predisposing ones that produces the insanity. Different causes will produce similar forms of insanity in the same subject. Thus, we have in Bethlehem at present a woman whose two earliest attacks followed child birth, the third came on during pregnancy, and the fourth followed tonsillitis. Similar causes will produce different forms of insanity in the same patient; thus one girl came in suffering from acute mania following amenorrhœa and was cured of both ailments, but within two years had profound melancholy with the same suppression of menses; she is now again well. Similar causes of excitement may produce different forms of insanity in different persons; thus I have seen religious revivals produce mania with the utmost violence in one, and melancholia with suicidal tendencies in another. In one the patient believes he is heaven-born and a saviour, and in the other that he is eternally damned.

We can scarcely consider too many things among the predisposing causes, as the collection of facts as to the environment may help to clear up points still misunderstood.

1.—Nationality. There is a difference in races; thus, in England, we get very many general paralytics, whereas in Ireland they are very rare. In active-minded races, such as the English and Americans, insanity is more common than among the French or Belgians. Yet this is not the only cause of the extra amount of insanity. The soil, the climate, and the degree of physical well-being have some effect. In Norway the proportion of insane is nearly as large as that in England.

2.—Social position. There are as many rich insane as poor; the immaterial and exciting and often objectless life of the former acts as injuriously as the bad food, lodging, and drink in the latter.

Some vocations seem more dangerous than others.

Beggars are pretty free from insanity, but prostitutes often become mad. In Bethlehem governesses and clerks are our chief patients. Constant monotonous mental work is more injurious than much of many kinds. The clerk with eight hours' work a day is more exhausted than the statesman or judge who works much longer but has greater change.

Imprisonment, especially with solitary confinement, is very liable to produce insanity, hallucinations being common.

3.—As to the effects of the seasons, I believe we get more acute attacks in the early part of the summer than at any other time. It is hardly necessary to say that the moon has no direct relation to lunacy; the presence of light enables a sleepless patient to be more destructive and active. Some patients seem more excited at the times of thunder, but the exact relationship is not known. So many forces come into action; thus a wet day may cause excitement in an asylum because the patients have been unable to get out of doors and are thrown more together.

4.—The relation of sex to insanity is complex. The male seems to suffer most from excess, but women in child-bearing have an added danger.

We get more general paralytics among men, but I think more delusional cases among women. In England there are more insane women than men, but at Bethlehem we cure nearly 10 per cent. more women than men. Insanity is more common in unmarried men and married women. It is very common in widows.

5.—Age has some special effects. We look for idiocy in early childhood as the child has no settled mental structure that can be perverted, it is simply destroyed. I have seen a short attack of mania in a child of four years, and suicide is not so very rare in childhood. The age of puberty is a dangerous one for both sexes, but we see more attacks of insanity at maturity than at any other age. There are many cases of insanity due to the climacteric and to senile changes. General paralysis is a premature decay in middle life.

We next pass to the consideration of special predisposing causes.

1.—I look upon inherited taint as the chief predisposing cause; we do not yet know the relationship of other forms of degeneration in the parents to insanity in the children. In inheritance we must note other forms of neuroses than simple insanity. Diseased arteries may produce apoplexy in one person and melancholia in another. I have known two "eccentric" but sane parents produce three insane children, the morbid force being increased; the same holds good of marriage of near of kin.

The state of the patient at the time of begetting a child may affect the child, thus one patient suffering from his only attack of mania which followed a severe attack of cholera begot a child who became insane, the rest of the children being healthy. Probably the mother passes on the tendency more to female children. I have known several cases where the females only of a family suffered, the more distant suffering from slighter forms of neuroses, such as somnambulism.

Fathers seem to pass on the tendency to both sexes indifferently. I have records of several women suffering from puerperal mania whose mothers suffered from the same disease. Children begotten before a parent goes insane are less liable to insanity than those born after an attack; but I have records of several cases in which the children were insane before the parent had an attack. The children may suffer from a similar or a different form of insanity to the parents. There are some cases that one at once suspects inheritance in; such as forms of emotional insanity in which the intellect is clear, such cases as are often considered hysterical. I believe general paralysis is not strongly hereditary.

2.—Education may have some effect either from neglect or undue forcing, this latter acting rather by injury to physical development.

3.—As to mental and physical constitution one can only

say that weak and strong may both suffer. The intelligent and active at least as often as the puny. We generally notice melancholy more associated with dark complexions. General paralytics too are noteworthy as fine men. Idiots never seem to suffer from this disease.

The exciting causes may be (1) psychical or (2) physical.

Intellectual exertion in the adult rarely leads to insanity. Violent emotions (especially of a painful nature) are dangerous: thus a woman awoke to find her husband dead by her side and became a suicidal melancholiac, a similar result was produced by the husband's death by falling overboard. I have hardly ever met with an excessively joyous shock producing insanity.

Sudden frights produce acute dementia especially in young subjects; thus one patient in Bethlehem was frightened by an explosion of fireworks discharged at him in a dark lane and was demented for four months. Another was rendered insane by a cyclone and the ship being on fire. Continuous worries are dangerous, family troubles most affecting women, and money troubles the men. Suppressed emotions may first act by impairing the general health.

Some causes act both physically and mentally, such as drink. Sexual excess and self-abuse act doubly, the irritation with exhaustion and the feeling of self abasement. Sexual excess is more often a symptom than a cause; it is present in general paralysis and in the stage of on-coming mania. The congested eyelids and conjunctivæ, the dilated pupils and clammy extremities associated with hallucinations of hearing are almost certain to be due to onanism.

2.—Physical causes. Most diseases of the brain may lead to insanity; thus chronic meningitis, epilepsy or any of its causes, and apoplexy. Again the various injuries to the head may produce insanity, or the results of the injury may set up epilepsy or other mental disease. I have seen several cases suffering from acute mania within a short time of a blow on the head and also one case of partial dementia. Many cases of general paralysis are due to injury to head or spine. I have seen it follow a fall on the head from a horse, and in two cases injury of lower part of spine.

One patient became insane after a powder explosion, and another, at present in Bethlehem, became unusually susceptible to drink after an injury from an exploding shell. The prognosis is bad in cases of insanity following injury. Sunstroke is credited with more cases than I think is just, at least in England.

We rarely find crass organic disease of the brain. Not one per cent. of our cases present any tumours, exostosis, &c.

Every year we get cases associated with acute febrile diseases, in some cases mental symptoms preceding, in others following the fever. Last year we had one case of mania that developed a scarlitinal rash 20 hours after admission, and another that was manicial at the time he had acute Nephritis.

We have just discharged one case admitted after Typhoid. We have had two with ague and several with Pneumonia. Rheumatic fever is sometimes associated with a peculiar form of depression, and I have seen some cases that have never been mentally well after an acute attack of this disease.

Syphilis may cause insanity from tumours setting up irritation, from the cachectic condition, and perhaps besides from causing disease of the brain directly or through the vessels. I have seen several cases cease to improve mentally till treated for syphilis.

Heart disease is often associated with melancholia.

We often get patients with early phthisis refusing their food, but I have only once found tubercle in the brain in such a case, and that was along the vessels.

We rarely see cancer in an asylum. I have known one case of cancer of pylorus refuse food under the impression there was obstruction. I have seen melancholia once with perityphlitis. Local uterine disease will set up insanity. We have had lately one case of ovarian dropsy, one of a large uterine fibroid, and several of small fibroids and mal-positions of the uterus. Pregnancy, parturition, and lactation may produce insanity, and seem to be specially dangerous in producing a form that is liable to recurrence.

(To be continued.)

THE ARTIFICIAL PRODUCTION OF ORGANIC COMPOUNDS.

For a long time it was assumed that the elements present in living bodies obeyed laws entirely different from those which rule inanimate nature; while the ordinary laws of chemical affinity were found sufficient to account for the reactions of the elements of the latter, the former were supposed to be under the influence of a subtle, ill defined and mysterious manifestation of force, distinguished by the name of vital force. In the bodies of plants and animals the transformation of inorganic or mineral materials into proximate organic principles some very complicated in their constitution, others more simple, was effected by the agency of this immeasurable force; hence, although organic bodies might be changed into other organic compounds, it was deemed impossible to prepare any such body synthetically, that is by the direct building up of its elements; in this, then, was based the division of Chemistry into inorganic or organic, the latter including all the substances of which the bodies of plants and animals are made, as well as most of the compounds which can be got from them—in other words, organic compounds were the direct or indirect products of vital force. So slowly did advances take place in the knowledge of chemical constitution, that it was only about fifty years ago that the synthesis of an organic body was clearly demonstrated. In 1828, Wöhler succeeded in building up from its elements the very characteristic animal product, Urea, and when, twelve years afterwards, the formation of Cyanogen was accomplished by the direct combination of C and N, the possibility of forming the product of the living organism from inorganic materials was firmly established. Our ideas of a vital force have consequently undergone much modification since then, but the term itself is so vague, and means so little or so much, that we find it extremely useful in explaining away many of the phenomena of that stage in the existence of matter called Life.

A special division of Chemistry has therefore been made, called "Physiological Chemistry," or, the "Chemistry of Organized Bodies;" and we may suppose it to be presided over by this so-called vital force or essence of life, and the function of this vital action is the manufacture of organizations, such as cells and fibres. The following are a few of the most remarkable cases of synthesis:—

1.—Formation of a Hydrocarbon. Acetylene $C_2 H_2$ is the only one that has been formed directly by combination of C with H, and it is accomplished by the passage of a powerful electric arc across two carbon electrodes in an atmosphere of hydrogen gas. If Acetylene be heated in a long narrow tube to a very high temperature, three atoms of it combine to form Benzol $C_6 H_6$, the hydrocarbon of the aromatic series.

Synthesis of Carbolic Acid (Phenol). To do this we require Sulphuric Acid and Caustic Potash and Benzol—the last we have already got. To obtain the Sulphuric Acid, burn Sulpher in air and pass the SO_2 so formed mixed with O gas over heated and finely divided Platinum, the two combine and crystals of SO_3 are obtained; dissolve these in water when $H_2 SO_4$ is formed. To get the Potash, drop Metallic Potassium into water, when H is evolved and KHO remains. The synthesis of Phenol may then be represented in two stages.

A. $C_6 H_6 + H_2 SO_4 = C_6 H_5 \cdot HO \cdot SO_2 + H_2O$

B. $C_6 H_5 \cdot HO \cdot SO_2 + KO = KHSO_3 + C_6 H_5 \cdot OH$ (Phenol).

2. Formation of Prussic Acid. Pass electric spark into a

mixture of Acetylene and Nitrogen, when $C_2 H_2 + N_2 = 2$ HCN. By this we get into the Cyanogen series; a very great number of the compounds of this series can be got synthetically.

3.—Formation of Urea synthetically. This celebrated experiment was thus performed by Wöhler. Carbon and Potassic Carbonate are made red hot and a current of air or Nitrogen is passed over them, by this, Cyanide of Potash is formed; heat this KCN with Lead Oxide, when the oxide is reduced and Cyanate of Potash is obtained; dissolve this KCNO in water and treat it with Sulphate of Ammonia when $2\ KCNO + (NH_4)_2SO_4 = 2\ NH_4 \cdot CNO + K_2SO_4$. Dissolve out the Cyanate of Ammonium NH_4 CNO and distil it, when it undergoes a molecular change and Urea is obtained. Urea has the same composition $CO \cdot H_4 \cdot N_2$.

4.—Formation of a Vegetable Alkaloid. Conine, the Alkaloid of Conium Maculatum, was first prepared artifically by Schiff a few years ago; it may be done thus: Butyric Aldebyde with an Alcoholic Solution of Ammonia when $2\ C_4 H_8 O + NH_3 = C_8 H_{17} NO + H_2O$; then on distillation $C_8 H_{17} NO - H_2O = C_8 H_{15} N$. (Conine).

This synthesis is of very great interest on account of the therapeutic relations of Conine; taken in conjunction with the researches of Crum Brown on the Methyl Compounds of Strychnine, it has given rise to the day-dream that one day we shall be able to manufacture drugs with the physiological action we require.

5.—Formation of an optically active Organic Body. The merit of this is due to Jangfleisch; he prepared Meso-Tartaric Acid by digesting Dibromsuccinic Acid with Argentic Oxide; by heating Meso-Tartaric Acid to 175°, it changes into Racemic Acid, and this can be resolved into Dextro and Lœro-Tartaric Acids. As he used Ethene ($C_2 H_2 + H_2 = C_2 H_4$) to prepare his Succinic Acid (which by action of Bromine, gives the Dibromsuccinic Acid); he thus obtained two substances, Dextro Lœro-Tartaric Acids, which turn the plane of polarization to the right and left respectively.

I have only picked out a few of the most remarkable instances; but the whole subject of synthesis is very interesting and important and will well repay investigation.

GEORGE MACKERN.

ROYAL COLLEGE OF SURGEONS.

At the recent Examination for the Diploma of Member the following gentlemen were successful:—

Mr. Donbavand	Mr. T. F. Pedley (*Surgery*)
,, Jones	,, L. M. B. Jones (*Surgery*)
,, Evans	,, Fell
,, W. P. Reynolds	,, J. Todd
,, C. W. Lacey	,, Slatter
,, J. T. Brett	,, Dring
,, J. Davies	,, W. Gibson
,, I. A. Richardson	,, E. G. Dutton
,, Irving	,, T. Duke
,, C. Gross	,, Perry (*Surgery*)
,, W. Strover	,, Welshman
,, Stevenson	,, Cusack
,, Bevan	,, Brock
,, Gathergood	,, Rowbotham

THE GOLD MEDALS.

The Treasurer's Gold Medal for Clinical Medicine was awarded to Mr. W. P. REYNOLDS.

The Treasurer's Gold Medal for Clinical Surgery was awarded to Mr. R. BEVAN.

Mr. W. P. REYNOLDS *proxime accessit.*

STATISTICAL REPORT OF LYING-IN CHARITY FOR JUNE, 1876.

Number of women attended			179.
Recovered	179.		
Died	0.		
	179		
Women attended in 1st confinement			28.
,, ,, 2nd ,,			34.
,, ,, 3rd ,,			24.
,, ,, 4th ,,			22.
,, ,, 5th ,,			21.
,, ,, 6th ,,			10.
,, ,, 7th ,,			10.
,, ,, 8th ,,			8.
,, ,, 9th ,,			9.
,, ,, 10th ,,			7.
,, ,, 11th ,,			2.
,, ,, 12th ,,			2.
,, ,, 13th ,,			2.
			179
Full time children.			
Males alive	78.		
,, dead	6.		
Females alive	93.		178
,, dead	1.		
Premature deliveries, 6 to 8 months.			
Males alive	1.		
,, dead	1.		2
			180.
Number of dual births			1
Single			178
			179
Presentations.			
Vertex			172
Breech			3
Face			1
Foot			1
			180
Operations.			
Forceps	2		
Post-partum hæmorrhage ...	1		
	3		

Externs:—Messrs. O. Bowen, G. H. Parry, H. A. Baber, J. Morgan, R. A. Hart.

Resident Obstetric Assistants:—Mr. A. de Winter Baker, Senr., Mr. J. W. Bull, Junr.

GUY'S HOSPITAL *v.* TOOTING WANDERERS.

This match was played at Mitcham, on July 19th. Chapman having won the toss for Guy's, elected to bat, and we were not disposed of till the respectable total of 216 was put together. Earle batted in splendid form for his score of 90, Bryden and Keer also doing good service. The Tooting

Wanderers only succeeded in obtaining 114, being speedily got rid of by Taylor and Keer, and having to follow their innings, left us easy winners of this our last match of the season.

GUY'S.

V. Chapman, c Page, b Des Graz	14
J. H. Earle, c Bonner, b Des Graz	90
R. S. Taylor, c Bonner, b Des Graz	5
W. Phillips, b E. R. Daun	6
R. J. Bryden, run out	30
J. Keer, c Page, b Bonner	22
J. S. Trousdale, b Roller	4
J. J. Tomney, b E. R. Daun	5
J. G. Smith, c Roller, b Bonner...	11
J. Osborne, not out	7
A. Jones, absent	
Extras	22
Total ...	216

TOTTING WANDERERS.

	1st Innings.		2nd Innings.	
H. J. Page, b Taylor	0	b Keer ...	3	
T. K. Tapling, c Trousdale, b Taylor ...	2	b Keer ...	4	
A. J. J. Barker, b Earle	0			
R. F. Bell, c & b Taylor	17	not out ...	24	
M. Des Graz, b Taylor	2			
W. E. Roller, l-b-w, b Taylor	15			
T. S. Franks, not out	18	not out ...	29	
G. F. Bonner, b Keer	16			
C. J. Daun, b Keer	7			
E. R. Daun, b Keer	3			
C. G. Patrick, b Taylor	1			
Extras	33	Extras ...	8	
Total ...	114	Total ...	68	

FAITH.

A great deal of harm arises in the world through our perceiving things partially and becoming familiar with their names, and then thinking and talking as if we knew all about them.

This is not very inconvenient when the things in question are ordinary commodities, animals, or people of any sort, because, when talking of any such articles, etc., the names serve as the labels of sufficiently definite and well-enough known things; so that when we speak of such things we know what things we are talking about even when we don't understand much about those things.

But it is different when people proceed to talk about such matters as their own mental faculties, for then they may not only not understand much about those faculties, but they may not quite know what the faculties are that they are talking about. We probably all have the same sorts of faculties, and there are names for those which people more or less mutually recognise. But have you ever thought how probable it is that persons in speaking by name of any faculty of their minds, of their knowledge, their faith, &c., for instance, don't mean the same mental article by the word faith or knowledge? I think we all have the same faculties, but whether it is that a faculty highly developed in one is relatively dwarfed and hidden in another I know not. This I know, however, that when persons speak of their faith, knowledge, etc., they don't all mean the same things by those words. I feel sure of this, because I have heard a man speak of his faith, and mean by it his charmed sense of a goodness which it was his life's design to join in, and I have heard another man speak of his faith, and mean by it something he did not think he need pursue, but which he rather held on by while he took all the things that came within his grasp. So that with one man faith may be compared to wings supporting him by his own brave effort where there is no ground to stand upon; and, with another, faith is as a prehensile tail, such as you see on those monkeys who, holding securely by something they are not obliged to keep in view, have their hands thereby the more free to pick nuts, &c. Let us not think disrespectfully of any; to the born prehensile such a tail is a requisite. We see how needful it may be at the "Zoo." And though nature gives to the human form no such outward and visible sign of dependence, it may be just the same inwardly with men.

Now the two people to whom I have alluded as meaning such different things by their "Faith," would read things written about faith and perhaps would speak of faith together, and very likely would misunderstand each other and almost quarrel, or at least think strangely of each other, never suspecting that they did not mean the same thing by their faith.

The one man means by his faith his hold upon certain things he thinks he knows, by which hold he would remain fixed. The other man means by his faith his desire after better knowledge, and his belief that better knowledge is to be and will be obtained, in which desire and belief he continues moving towards the aim of his faith.

Now the man who obtains a certain hold upon things he thinks he knows, and who makes use of that hold for the purpose of mental stability and for obtaining means of purchase, and who attaches the great word faith to this process, does injustice to his own mind and to the minds of those influenced by him; for there is no faith at all in such a dead-alive proceeding; or, at any rate, if common usage allows the word "faith" to such adhesion, some other word, conveying, if possible, a higher and more ennobling esteem should be found for the impulse after better knowledge, which some call "living faith."

To use the noblest word in language—"faith" for a process or mental condition such as we often see it employed for is simply preposterous. To get a certain amount of knowledge and then say of it "that is my faith" is an absurdity only too vulgar. Very often the knowledge which one calls his faith is simply too much for him, and has taken all active faith out of him. I have met the modern scientific and well-read youth, who has studied chemico-physiological lectures until he thinks that the life is nothing more than meat upon

texture and its vitality, and read Carlyle's "*Sartor Resartus*" until he suspects "nor the body than raiment," and who would call the holding of such opinions "faith," and then wonder at the enthusiasm faith has created in the world.

Seeing this result so often, has led me to believe that excess of knowledge *in the form of statements learned at second-hand* is dangerous to faith; so that in growing a faithful mind, one must see that the second-hand statements taken in by it have a certain limited proportion to the impulse after better knowledge which is true human faith, lest that impulse be overwhelmed, and the mind be left prehensile, clinging to what it thinks it knows.

They say "knowledge is power;" but knowledge is power only when living faith has ability to use it. Knowledge is power when faith has identified you with it. Crowds of things are told you on such grounds that they go in your mind as "true." Yet they tend often to conflict together when you have to come to a decision, true as they are. It is when you have personally to decide that you will find out the difference between faith and knowledge. Until then you have "knowledge" of many things, but you cannot tell what your faith is until you have to act. How many men endure much *ennui* and languor because their circumstances are quiet and they have an immense lot of things in their minds, various and dubious, because conflicting; and yet nothing obliges them to decide. The fact is, that in their quiet times, men don't know what it is to believe; but sterner issues now and then arise, and men have to say what they are for. Then arises belief, and afterwards, faith. Then faith becomes real, you live in it and die for it. But in quiet times men forget what faith is, and are apt to have no faith and to lose the true meaning of the word; so that they drop down from faith to belief, and from belief to mere knowledge, until they treat all these distinct things as if they were the same, and forget that *knowledge* is the crowd of things which have been at various times accepted by the mind, and *belief* is the perception of an issue rising out of matters of knowledge; and faith is the devotion of your unreasoning faculties to that issue; so that where no such issue arises, there may be knowledge but no belief; and where the issue does not cause devotion of your feelings, there may be belief but no faith.

A judgment on matters of knowledge in which there is no issue pending is only an opinion, that is a conclusion in a balanced statical condition. But in the rise of belief and faith a dynamic power is introduced. What I believe is what I would be and do if identified with a side in the issue.

Faith is part of your acting nature; noble faith is part of nobly acting nature; ignoble faith is part of ignobly acting nature. It developes with your acquirement; choosing some lines instead of others; forsaking some lines; noble belief following the lines that offer most possibilities of higher growth. Did you ever watch the growth of a tree? If you look into a tree of any height you will see the stumps of many branches which it has cast off in its growth, branches which did not go in the best directions, so that other branches took their light away because they were able to rise above them. The tree grew lofty by its power of choosing lines that sent some boughs up above others and so starved them. That power in the tree is analogous with living faith. But watch a scrubby bush and you will see that it differs from a tree in its equal treatment of all its sprouts—they all flourish alike—there is no sacrifice of one to others, and hence no upward progress. And minds that cling to every reality as of equal value or "Truth," are and remain scrubby minds like to the scrubby bushes.

The fact is, you cannot believe all you "know;" some things you know conflict with other things you are sure of. Your faith exists in the conflict of opposing things that are equally "true." If this seems nonsense to you, then think on what the physiologists tell you of the texture-life of your body. If you ask what life is, they say it is the composition and separation of texture, and if you ask what composes texture, they say chemical affinity, and if you ask what separates texture, they say "chemical affinity;" so that life exists in and by the composition of things under laws of chemical affinity, and their decomposition under laws of chemical affinity; and the power of life is that very conflict within the range of chemical affinity.

What wonder, then, if faith, the life of the mind, exists in and by a like continual constructive and destructive play in the things whose composition forms your mind; so that faith, the life of the mind, exists in and by the composition and embodiment of mental acquirements under laws of truth and their destruction under laws of truth, and the power of faith is that very conflict itself within the range of truth.

For as opposing chemical affinities are to life, so are opposing truths to faith, and as there is no bodily life without destruction and elimination of tissue supplemented and restored by other tissue laid down in just succession. So there is no faith without destruction and elimination within your body of knowledge. In short, in your faith you must reject and deny. There is no faith without a continuous integral rejection and denial of exhausted truth supplanted and restored by other truth laid down in just succession.

In the life of the body-units in Prof. Beale's view the formless only is truly alive, and whatever has taken distinctive shape in the form of muscle, bone, &c., is dead matter. Whether this is true of the tissues or no, I am sure it is true of the mind that whatever has taken precise form, as proven knowledge, is dead to the life of faith, and is only alive so far as unformed living faith has power to put it into motion. So it happens that the man with the largest faith is also the man with the largest doubt; and if he seems foreclosed on points where little sceptics air their uncertainty, it is because he has

no petty doubts; and if he seems dubious where little prehensile believers are sure, it is because they are incapable of faithful doubting.

You may think I am wrong in calling this power of the mind, this power of life in the mind by the name of "faith!" but what would you call it? Ought it not to have a name? Is there not a power in each of us who truly lives, a power itself formless which governs the form of all that organically enters the mind? This power I call faith, and wish to keep it distinct from all prehensile faculties. This faith moves forward, confident in clear sight and confident in the future. It is not constant in any mind. It is contagious from mind to mind. The ordinary word whose import is nearest to it is the word *meaning*; no one can have this faith unless he has a meaning. He has no faith who means nothing; and the common nature of faith and meaning is best seen in their common feature of contagiousness. The highest and ultimate signification of faith is in this contagion. By this contagion it comes that there is more in the world of men than can be worked out in terms of its units; I mean in accordance with the limits of the interests of single persons. And he who does not see what I mean does not know what faith means; he confuses it with knowledge, creed, opinion or other comparatively dead things.

PILOCEREUS SENILIS.

SPECIALISTS & SPECIALISM.

We doubt whether London receives benefit from any one of its numerous Special Hospitals, except, of course, those for the infectious diseases. It is certainly useful to establish Hospitals in certain situations for those diseases which are known to be best treated in these localities; and it may be useful to have Hospitals for Children, although seeing the way in which children are cared for at Guy's, we do not see why students at General Hospitals should not have the benefit of seeing their diseases. But for "Specials" which only deal with cases which could be better treated at our General Hospitals we have a supreme contempt.

We will not describe at length the way in which these Specials are founded. A hitherto unheard of practitioner, a collection of blatant nonentities, a great gun to lay the foundation stone, a sumptuous luncheon to propitiate the reporters, and the picture is before us.

So great is the supposed honour of writing after one's name "Senior Surgeon to the Hospital for Imbeciles," that obscure practitioners vie with one another for the distinguished title as if it were the acme of ambition. We have now authorities on Lungs, Liver, Kidneys and Bladder, with others renowned for their treatment of Cancer, Fistula and Toe-nails. Of course a Surgeon may pick out one class of cases and pay them special attention, but we doubt whether a true specialist, who for many years sees but one line of practice, is competent to form a sound opinion even on his own speciality. It is only after all the other contingencies of the case have been eliminated that his opinion is worth anything, for as is humourously sketched by Charles Reade in "Hard Cash" a specialist becomes unable to believe that any part of the body but his special favourite is capable of becoming diseased. A liver doctor would tell a patient in the last stage of Phthisis that he was only suffering from an "Accumulation of Bile;" whilst we dare not even venture to guess what so distinguished a man as the Surgeon to the Hospital for Fistula would say on such a case.

The one point in this question which is of interest to us Students is, that each Special that is founded tends to draw off cases of that class from the General Hopitals; and although the practice of a large Hospital like Guy's may not, at least at present, be influenced, it is easy to see the tendency of Specials is to deteriorate and curtail student experience. Even now it is possible for the "Lancet" to state that at one large Metropolitan Hospital but one case of Stone was treated in 6 or 12 months, and such a fact is a serious drawback to the utility of such a Hospital as a medical school. We would here call attention to the danger of Surgeons at medical schools taking up Specialities. While as we have seen but one case of Stone was treated at a Hospital in 6 months, it is well known that the wards of an eminent Specialist at another school are filled with little else than cases for Lithotomy and Lithotrity, and such a thing is unfair to the whole body of students. We come to a Hospital to gain an insight into all classes of cases, and each Surgeon should remember that while he is cramming his wards with his speciality he is, at least as far as he is concerned and if the examination boards allow him, turning out into the profession a clique of incompetent Specialists, able to treat but one class of cases, and that a class perhaps which they will rarely be called on to deal with.

We would urge this subject of "Specialism" on the attention both of our Staff and Students, since it is only by an united opposition that this most objectionable practice can be stamped out.

H. D.

Correspondence.

[We have received a letter for insertion signed with the pseudonymic initials "X Y Z." Surely the gentleman who wrote it must be aware of our rule to insert no letter unless the writer's name accompany it, not for publication, but for the Editor's use. The *raison d'être* for this rule is obvious. If the writer will send us his card, we shall be happy to print his letter in our next issue.]

ED.

APPOINTMENTS, JULY 20TH, 1876.

RESIDENT OBSTETRICS.

Shadwell, Sept.; Romano, Oct.; Lancaster, Nov.

DRESSERS.

W. C. James, Horrocks (Mr. Cooper Forster).
C. K. Shaw, J. T. Hinton (Mr. Bryant).
Barrs (Mr. Durham). Tarrant (Mr. Howse).

CLINICAL ASSISTANTS.

C. G. Lee, Pickering, W. P. Reynolds, Bevan, Brett, Birdwood,

EYE WARDS.

Lubbock, Richardson, Pedley, November.

ASSISTANT-SURGEONS' DRESSERS.

R. A. Hart, Plummer, H. O. Stuart, Messum, (Mr. Davies-Colley.)
Mansell, L. W. Reynolds, Adcock, Briscoe (Mr. Lucas).
Morley, Jee, J. Brock (Mr. Bird).
Ross, Edward Jones, Wells (Mr. Jacobson).

DRESSERS IN SURGERY.

Keep, Giles, Burt, Sheldon, Steele, W. Gray, Flower, Theed, Parke, R. Thomas, R. Parry, Baldwin, M. A. Hart, Uhthoff, J. Rees, C. F. Campe.

MEDICAL WARD CLERKS.

O. J. Slatter, Crooks, Mackern, Malpas, I. W. Richards, R. Lee, Uhthoff, J. W. Meek, Jaynes, Chubb, G. H. Parry, Gross, Liebstein, Maclean, Sheldon, Baber.

ASSISTANT-PHYSICIANS' CLERKS.

J. Poland, J. H. Poland (Dr. Fagge).
E. Lynn, Hartly (Dr. Pye-Smith).
A. B. Hammond, Puddicombe (Dr. Taylor).
J. A. Masters (Skin).

OBSTETRIC OUT-PATIENTS' CLERKS.

Gross, Hammersly, J. H. Poland, 1st half.
Bowen, Nugent, Lowdell, 2nd half.

SURGICAL WARD CLERKS.

Burt, Langley, Theed, Griffiths, R. T. Jones, J. Davies, R. Parry, W. Whitworth, Baldwin, Ernest, J. Rees, Campe, P. James.

AURAL SURGEONS' DRESSERS.

P. James, Nugent, Hammersly.

DENTAL SURGEONS' DRESSERS.

Chubb (1), J. H. Edwards (2), F. F. Jones (3).

ASSISTANT-SURGEONS' CLERK.

N. A. Phillips, Saturday.

SAVORY & MOORE'S

(PATENT)

MEDICATED GELATINE PREPARATIONS,

COMPRISING THE

ROUND DISCS FOR OPHTHALMIC PURPOSES.

Which were originally introduced by this firm, and have now been in general use by the Profession in this country and abroad for nearly twenty years.

"Much smaller doses of medicaments such as Atropine, Eserine (Physostigmine), Sulphate of Zinc, Morphia, &c., suffice to produce a marked effect by this form of application than when drops are introduced."—*The Lancet.*

"The transparent Discs dissolve admirably in contact with the moistened conjunctivæ. Nothing can be imagined more practical."—ANNALE D'OCULISTIQUE (Belgium, June 30th, 1864).

These (*Round*) Discs are contained and supplied in small tubes and cases, holding nearly 100 Discs each, and have been pronounced by all the Members of the Profession who have employed them to be the best media for Ophthalmic applications, as the *corners* of the square preparations used for this purpose are apt to irritate the Eye of the patient.

NEW DISCS FOR HYPODERMIC INJECTION.

Prepared by SAVORY and MOORE, at the suggestion of Dr. A. ERNEST SANSOM—viz.,
Morphia, Atrophiæ Sulph., Strychnia, Apomorphia, Ergotine, Codeia, Caffcine, &c., &c.

These Discs may be carried in the smallest-sized pocket-book, are soluble in a few drops of warm water and offer a *certain* and *immediate* means of securing hypodermic injections.

Their advantages over the ordinary solutions, are portability, accuracy of dosage, and prevention of waste, as they will keep good for any time; whilst in a few seconds they form a reliable injection, the whole series used in Hypodermic treatment occupying no appreciable space.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

JOHN B. MEDLAND,

MICROSCOPE & SCIENTIFIC INSTRUMENT MAKER.

MEDLAND'S STUDENTS' MICROSCOPE, COMPLETE £3.

An excellent Working Instrument.

EVERY DESCRIPTION OF APPARATUS FOR MICROSCOPICAL PURPOSES, MOUNTING FLUIDS, GLASS SLIPS CELLS, THIN GLASS COVERS, &c., &c.

CLINICAL THERMOMETERS from 7/6. URINOMETERS from 3/6.

Photographs of Guy's Hospital, Portraits of Guy's Medical Staff, Eminent Medical Men, &c., &c.

10a, BOROUGH, LONDON BRIDGE

(CLOSE TO THE RAILWAY ARCH).

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine and Surgery.

NEW SERIES.—No. 9. SEPTEMBER, 1876. SIXPENCE.

CONTENTS.

Clinical Lecture on Cancer of the Stomach 99

Leading Article 104

Notes of the Month 105

In Memoriam 106

Notes of a Clinical Lecture 106

Mental Diseases... 108

Correspondence 109

On Duty for September 109

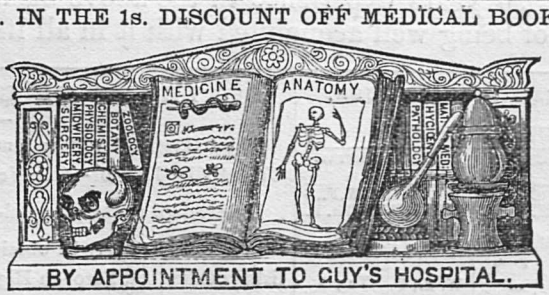
Statistical Report 110

Medical Session 110

Some New Medical Works by celebrated French and German Authors 110

3d. IN THE 1s. DISCOUNT OFF MEDICAL BOOKS.

NOTE BOOK FOR EXPERIMENTS IN ANALYTICAL CHEMISTRY, 2s.



NOW READY.

Mr. BRYANT'S NEW SURGERY,

2 VOLS., 19s.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE,

(Nearly opposite St. Thomas's Street).

BOOKS BOUGHT OR TAKEN IN EXCHANGE.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.
TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

Brother to MONSON HILLS,

and for many years Manager to the late J. MILLIKIN,

Would draw the attention of the past and present Pupils of GUY'S HOSPITAL to his Stock of SURGICAL INSTRUMENTS and APPLIANCES, &c., all of which are of the best make and finish, with all recent improvements.

Dressers Pocket Cases and Cases of Catheters

Large assortment of Stethoscopes, Clinical Thermometers, Spring Tape Measures, and Pocket Midwifery Cases.

H.J.H. having had over 25 years experience in the above business, affords him every opportunity of being well acquainted with it in all its branches.

Medical and Surgical Practice in London,

HOURS OF ATTENDANCE OF STAFF.

HOSPITAL.	MEDICAL. Daily.	SURGICAL. Daily.	OBSTET.	OPHTHAL.	DENTAL.
Charing Cross ...	1 p.m.	1 p.m.	Tu. F. 1.30	...	M.W.F., 9
Guy's	1.30 p.m.	1.30 p.m.	M. W. F. 1.30.	M.Th. 1.30 Tu. F., 12.	Tu. Th. F. 12
King's College ...	2 p.m.	1.30 p.m.	M. W. F., 1 p.m.	M.Th., S. 1	Tu. F., 10
London	1.30 and 2 p.m.	1.30 and 2 p.m.	...	W. S., 9	Tu., 9
Middlesex	1.30 p.m.	1 p.m.	M.W., 1.30	Tu.F., 8.30	Daily, 9
St. Bartholomew's	1.30 p.m.	1.30 p.m.	M. Th., 2 W. S., 9.	Tu. Th. S., 1.30.	Fr., 9
St. George's... ...	1 p.m.	1 p.m.	Th., 2.	W. S., 2	Tu. S., 9.30 Th., 1.30
St. Mary's	1.15 p.m.	1.15 p.m.	Fu.F., 9.30	M. Th. 1.30	W. S., 9.30
St. Thomas's ...	8.45 a.m.	8 a.m.	W. F. 12.30	Daily, 2, ex. S.	Tu. F., 10
University College	1.15 and 2.30 p.m.	1.30 and 2 p.m.	Daily, 1.30 ex. W. & S.	M. W. F., 2	W., 10.30
Westminster ...	1.30 p.m.	1.30 p.m.	Tu. F., 3.	M. Th., 3	W. S., 9.15

TERMS OF SUBSCRIPTION.

The "Gazette" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to MONTAGU LUBBOCK, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Lecture

By DR. HILTON FAGGE.

CANCER OF THE STOMACH.

After referring to three cases of different forms of Cancer of the Stomach that were in the Clinical Wards, the lecturer proceeded to make the following general remarks on the subject:—

Cancer of the Stomach is in every way a disease of great importance. Dr. BRINTON estimated that it caused one per cent. of the total mortality in London Hospital practice, and I find that at Guy's Hospital the proportion is even higher, namely, 79 in 5990 autopsies, or more than 1·3 per cent. According to Dr. BRINTON it is less common than simple ulcer; but an analysis of the post-mortem records at the Hospital during the last 20 years shows that there have been rather more than twice as many cases of cancer as of simple ulcer of the stomach.

It is generally said that there are three distinct varieties of this disease, respectively affecting the cardiac orifice, the body of the stomach, and the pyloric orifice. Now, as regards the first of these, I may at once state my opinion that almost all the cases that have been set down as examples of cancer affecting the cardia, have really been instances of cancer of the end of the œsophagus extending into the adjacent part of the stomach. So far as I can discover, the *Pathological Transactions* contain not a single example of cancer beginning in the stomach at its œsophageal end; nor does the museum of Guy's Hospital show any such specimen, in which the lower end of the œsophagus is not also affected. And in every one of the four or five cases that have at different times been recorded under the name of cancer of the cardia in the reports of post-mortem examinations at the Hospital during the last 20 years, there is room for supposing that the disease began either in the œsophagus or in the lesser curvature of the stomach. Indeed, on *a priori* grounds we should expect that a part at which the digestive tube is opening out into a large cavity should have little or no tendency to be affected with the disease, in comparison with the narrow passage above it.

Cancer of the middle of the Stomach, however, and Cancer of the Pylorus, must be carefully distinguished from one another. And as the latter is the more definite affection of the two, it may conveniently be first described.

The Pylorus, when affected with cancer, becomes greatly thickened, so that it forms a rounded swelling, which is often somewhat lobulated, and which is almost always sharply defined towards the duodenum, while it passes gradually into the wall of the stomach or extends for some distance along its lesser curvature. The disease generally involves the whole circumference of the orifice, which is consequently much narrowed. It grasps the finger tightly, or may even refuse to admit it; but cases are very rare in which a large catheter cannot be passed into the duodenum. The mucous surface is generally much reddened: it may either be smooth or present nodular excrescences, and sometimes distinct villous growths. Most frequently it is more or less extensively ulcerated.

On making a longitudinal section, one finds that the several coats of the stomach are still plainly to be recognized. The thickest part of the mass is that which corresponds with the submucous connective tissue; this generally makes up two-thirds of the whole. Next comes the muscular layer, which is likewise greatly augmented. This appears as a row of pinkish-grey translucent striæ, regularly arranged, with opaque bands between them, which last often consist of the cancer tissue. Still further outwards the subserous tissue is also thickened, but to a less extent: and it is generally infiltrated with the new growth. The peritoneal surface may either be unaffected, or it may be the seat of a simple inflammatory process binding it to the adjacent parts; or, again, it may present more or less numerous cancerous nodules.

Cancer of the middle of the Stomach is much more variable in its characters. In many cases it begins along the lesser curvature, and then it may either remain limited to that part or spread to one or both surfaces. I have notes of one case of this kind in which only a narrow border along the greater curvature was left untouched by it. In some instances it forms a more or less broad ring completely surrounding the centre of the organ. Sometimes, again, it appears as a large patch, with or without ulceration upon one surface only. Lastly, it sometimes affects the whole of the stomach almost uniformly.

Whatever part of the stomach may be affected with cancer is very liable to become adherent to any other structure with which it happens to be in contact. Most commonly this is the under surface of the liver, and the growth may then extend into that organ, and afterwards it may undergo ulceration; thus a large cavity may be produced, in which ingesta (such as grape skins) may lodge. Or the diseased portion of the stomach may become fixed to the surface of the abdomen. I remember one instance in which the anterior part of the abdominal wall had altogether disappeared, being fused in a mass of cancer two or three inches thick. A gastro-cutaneous fistula may result, but this is rare. Or, again, the growth may become continuous with a congeries of diseased glands near the pancreas, and with that structure itself. Or, perhaps more frequently, the first portion of the duodenum is drawn into adhesion with the back of the diseased pylorus; and sometimes an ulcerated opening forms between them, behind the proper orifice. This depends upon the fact (which I think was originally pointed out by LUSCHKA) that the normal direction of the first part of the duodenum is from before backwards. In other cases the diseased part of the stomach becomes adherent to the colon, and a fistulous communication between them afterwards developes itself.

I have hitherto spoken of Cancer of the Stomach as synonymous with malignant disease of that organ; and it appears that with only rare exceptions this is really the case. VIRCHOW only mentions two instances of primary sarcoma of the stomach, one of them being a case recorded by Dr. WILKS in the 10th volume of the *Pathological Transactions*. In each of these cases, and also in a third case of Dr. WICKHAM LEGG'S (in the 23rd vol. of the *Path. Trans.*), the patient was a young girl: and both the ovaries were at the same time affected with sarcoma. The disease seemed to have begun in the lesser curvature. VIRCHOW remarks on the comparatively slight tendency to ulceration as affording a further distinction between this form of disease and carcinoma of the stomach. But in a case of Dr. CAYLEY'S, recorded in the 20th vol. of the *Path. Trans.*, there were large nodules of the growth projecting into the cavity of the stomach, and these were extensively ulcerated. The patient was a man, æt. 57.

VIRCHOW does not mention any instance in which disease occupying the pylorus was of a sarcomatous nature, but three or four cases of this kind have been observed at Guy's Hospital. One was in a woman, æt. 47; the submucous tissue of the pylorus was three-quarters of an inch thick. Dr. MOXON describes it as thick but flabby, of a milk-white color, yielding a clear fluid when scraped, consisting mainly of a well-developed fibrous tissue, but also containing some delicate spindle-cells with very large tails. In another case, which occurred in a man æt. 66, the pylorus was the seat of a new growth of yellowish look and of firm consistence, which proved to be a round-cell sarcoma. A third case came under my observation in June, 1876. The patient was a man æt. 67. The pylorus, through which the finger could readily be passed, presented a large ulcer, seven inches in circumference, the base and sides of which were formed by a homogeneous pinkish white substance, which yielded no juice, and consisted of round and oval cells, and spindle-cells, imbedded in an intercellular substance containing mucin. Probably the cases which Sir THOMAS WATSON and others have described

under the name of simple hypertrophy of the pylorus were also examples of sarcoma. Dr. WILKS used formerly to lay considerable stress upon the fact that in some cases of so-called scirrhous pylorus the disease was really only a local thickening of the submucous tissue, with consequent hypertrophy of the muscular coat. He based this opinion partly upon the dry, juiceless character of the growth, consisting mainly of fibrous tissue, partly upon the absence of secondary cancerous nodules. This last fact, however, is not by itself conclusive; for I find that out of 41 cases of true carcinoma of the pylorus in succession at Guy's Hospital, there were at least five in which no cancer existed elsewhere in the body. And, on the other hand, in one case, which would otherwise have been designated simple fibrous thickening or hypertrophy, there were secondary nodules in the liver; the exact nature of which, however, is not specified in the report. One must bear in mind that carcinoma of the stomach (unlike carcinoma of the breast) is situated in what is termed a vital organ. Secondary growths would doubtless be found much more constantly, if death did not so quickly ensue.

As I have before stated, in cancer of the stomach the submucous tissue is more thickened than any of the other layers. The older pathologists therefore supposed that the disease began there, but this appears to be a mistake. According to WALDEYER it always commences in an over-growth of the glands in some one spot in the mucous membrane. These become elongated and dip down into the subjacent connective tissue; when they have reached it they proliferate actively, and so give rise to a cancerous nodule, which spreads out horizontally and may reach a large size, but which is nowhere connected with the superficial glandular layer, except at its starting point.

Carcinoma of the stomach, as of all other parts, presents in different cases characters which in some respects differ very widely. These in part depend upon the proportion between the amount of fibrous stroma forming the alveoli, and that of the nests of cells contained in them. If the stroma be abundant and the alveoli small, the growth has a tough fibrous appearance and yields but very little juice. If the stroma be scanty and the alveoli large, the growth is soft and of a milk-white color, giving much juice when scraped. But between the former (which would be termed "scirrhous cancer,") and the latter (which would be called "encephaloid or medullary") all gradations exist, and in some cases it may be difficult to say under which head the disease should be placed. As a rule, however, carcinoma of the stomach belongs rather to scirrhous. According to Dr. BRINTON three cases out of four belong to this form of the disease, and among cases affecting the pylorus I believe that the proportion would be still higher. As I have already stated it passes towards the serous surface between the bundles of the hypertrophied muscular coat; but there may be a partial destruction of them in the centre of the growth. On the other hand, as Dr. MOXON has pointed out, medullary carcinoma often causes the muscular coat to disappear over a considerable area; so that the whole thickness of the wall is converted into an uniform mass of disease presenting elevations on either surface, but especially towards the cavity of the stomach. Sometimes branching processes sprout from the mucous membrane, which form beautiful microscopical objects, being each made up of a central blood-vessel, clothed with thick layers of well-formed cells. These constitute what has been termed villous cancer, which, however, has no claim to be regarded as a separate variety. Dr. MOXON has described a case of this kind, in which the floor of the growth was formed by a large mass of soft carcinoma, growing directly into the substance of the liver. The observation is of importance, because it is said that a simple papilloma has sometimes been found in the stomach, analogous to the well-known affection which occurs in the urinary bladder.

In a very few cases a cancerous growth in the stomach has presented the characters of a cylinder epithelioma.

I have already mentioned that the surface of a carcinomatous growth in the stomach is generally ulcerated. Sometimes there are only a few superficial erosions, but very often a deep sore is formed, with hard raised ragged edges and a sloughing base. It is possible that the digestive action of the gastric juice may be concerned in bringing about the detachment of large masses of the cancer tissue, which sometimes leads to the erosion of bloodvessels of considerable size. In such cases the ulcer is horribly foul and offensive.

Cancerous growths in the stomach, as in other parts, are liable to undergo caseous degeneration. Sometimes scarcely a trace of active growth is discernable: it might be said that the primary affection had undergone spontaneous cure; but the patient has, nevertheless, died of an extension of the disease to other parts.

Another change to which cancerous growths in the stomach are particularly subject is that known as colloid degeneration. For a long time pathologists supposed that there was a special form of cancer characterised by its gelatinous appearance. This they termed colloid cancer; but such a view was attended with great difficulties, and not the least satisfactory result of the microscopical researches of the last few years has been the solution of the doubts which prevailed as to the remarkable affection in question. The stomach has always been known to be one of its principal seats. Sometimes the whole thickness of the organ is infiltrated with a jelly-like material, there being nothing to suggest the presence of ordinary carcinoma. But, more frequently, while some parts of the growth have the character of colloid, others have those of scirrhus or of a form intermediate between it and soft cancer. And under the microscope it is not uncommon to find that more or less colloid change is present in cases in which it may not be observed by the naked eye. It is in such cases that the real nature of the affection is most apparent. For it is found that the alveoli are no longer filled with the characteristic epithelioid cells, but that towards their periphery they contain a great or less quantity of a structureless translucent substance. As this increases the cells become less and less marked and finally disappear. It is said by RINDFLEISCH that they individually swell out into colloid globes, which ultimately blend with the rest of the structureless material that now distends the greatly enlarged alveoli; but he also thinks it probable that a part of this is the result of a chemical change in an albuminous substance secreted from the blood. As the alveoli increase in size they become spherical and the septa between them break down; and thus large translucent globes are formed, which under the microscope appear almost structureless. Cancerous growths which undergo extensive colloid degeneration are less apt to infect distant parts than other carcinomata; but on the other hand this form of the affection often spreads over the peritoneal surface, where it produces masses of enormous size.

To complete my account of the pathological appearances seen in the dead body in cases of cancer of the stomach, I must now refer to certain changes in the form and situation of the organ which arise when the pylorus is the seat of the disease. The obstruction of that orifice may then give rise to an enormous dilatation of the cavity; it may become large enough to hold six or seven pints, and it may fill the whole abdomen, its greater curvature sweeping round just above the pubes. Its walls may at the same time be greatly thickened by diffused hypertrophy of the muscular coat, but sometimes they are exceedingly thin. I shall hereafter have to describe the clinical effects of these changes, but I must add that the occurrence of dilatation is by no means constant. In some cases, probably, cancerous disease of the pylorus fails to obstruct the outflow of the gastric contents; or vomiting is so frequent that no accumulation of them in the cavity of the stomach takes place; or, lastly, the patient's appetite is so bad that scarcely any food is swallowed; while in other cases the extension of the morbid growth along the lesser curvature and into the surfaces of the organ tethers it and

prevents its dilatation. Indeed, when the lesser curvature is the original seat of the disease, the cardiac and pyloric orifices may be approximated by the contraction of the growth; and the anterior and posterior walls of the stomach may be flattened against one another, so that scarcely any cavity is left.

Of the *causes* of cancer of the stomach very little is known. It occurs chiefly in persons over 40 years of age. I find that in 46 cases eleven patients only were under the age of 40: of the remaining 35, there were sixteen between 41 and 50, eleven between 51 and 60, and eight beteen 61 and 70. These numbers correspond generally with those given by Dr. BRINTON. Among 43 of my cases, in which the sex was noted, 30 occurred in males, 13 in females. This also accords with Dr. BRINTON'S estimate; but certain other writers have said that the disease is more common in women than in men. Hereditary predisposition is said to be well marked in some cases. The *Napoleon* Family are cited as affording an instance of this.

In some cases cancer of the stomach has followed a blow upon the epigastrium or some other injury. ANDRAL related an instance in which it occurred in a patient who had taken nitric acid, and DITTRICH one in which arsenic had been swallowed. Habitual spirit drinking is a cause which has been mentioned by some writers; and by others the influence of depressing emotions.

The *symptoms* of carcinoma of the stomach differ so widely in different cases that it is difficult to give a good description of them. At first they are generally very indefinite; the patient, without apparent cause, begins to complain of a sense of discomfort in the epigastrium after his meals, he has a feeling of weight and pressure there, and he is perhaps troubled with acid eructations. He attributes these symptoms to dyspepsia; but his tongue remains clean, and yet he loses all appetite. Soon he becomes conscious that he is wasting. The uneasiness at the pit of the stomach passes into pain; this may be a dull aching referred to the epigastrium or to the back; or it may be exceedingly severe, and of a burning or lancinating character. It is generally more or less increased by meals, but it is by no means limited to the periods at which the stomach contains food. Presently the patient vomits. The times at which he is sick vary with the seat of the disease. When it is the middle of the stomach vomiting may come on soon after meals; when it is the pylorus the food is usually retained for three or four hours until it should be passed on through that orifice. The matters ejected consist at first of partially digested food or mucus, but soon these are streaked with altered blood, which is of a brown or black colour; or they may contain sufficient blood to resemble coffee grounds. Constipation and flatulence are also complained of. The aspect of the patient is altered; he acquires a pale, yellow, waxy look or his complexion becomes earthy. He is depressed about his condition, irritable, and morose.

These symptoms are by no means conclusive as to the existence of carcinoma of the stomach; they do not warrant more than a suspicion that such disease may be present; a careful physical examination of the patient can alone enable one to speak positively as to the real nature of the case. But in some instances the greater part of these symptoms are absent. Thus it is well-known that cancer of the lower end of the œsophagus extending into the adjacent part of the stomach is often latent, and I believe that most of the cases in which carcinoma of the stomach has run its course without producing any marked symptoms have been instances of this kind, such as generally receive the designation of cancer of the cardia. But Sir THOMAS WATSON relates a very similar case, in which the disease occupied the greater curvature. A gentleman, between forty and fifty years of age, was on his way home from Scotland (where he had been deerstalking and shooting grouse) when he was seized one night in a London hotel with a deadly faintness, very rapid breathing and severe pain referred to the sternum. He had before been gradually losing flesh and strength, but the only definite symptoms of which he had complained were sour eructations and a loss of appetite and repugnance to solid food. Sir THOMAS WATSON could detect no disease; he found the epigastrium full and pulpy. The next night the gentleman had a similar paroxysm and died. The larger curvature of the stomach presented throughout its whole extent a mass of scirrhus, while the cardiac and the pyloric orifices were free.

The examination of the abdomen, when cancer of the stomach is suspected, should be made in a particular way. The patient must be made to lie down, and the front of the abdomen must be exposed. Its shape must then be observed and particularly whether there is any fulness of the epigastrium or of either hypochondriac region, or whether on the contrary they are hollowed. Sometimes a tumour may be seen through the parietes, but most commonly it is to be detected only by manipulation. In some cases it can be felt as soon as the hand is laid upon the surface, but very frequently much care is required. The abdominal muscles are often very rigid, particularly those parts of them which overlie a deep seated swelling, and careless handling may throw them into contraction, so that nothing can be felt. The patient should be made to draw up his legs and to breathe deeply, making the diaphragm descend freely at each inspiration. If his attention can be concentrated on the inspiratory movements his abdominal muscles will often relax. The broad palm of the physician's hand (which must not be cold) is then to be laid gently upon the part of the abdomen which has to be examined, and it is to be allowed to rise and fall as the patient breathes; gradually slight pressure is to be made, which may be increased until the abdomen has been very thoroughly explored. During all this time the palm of the hand as well as the fingers should be kept evenly applied to the surface; and all sudden movements of the fingers' ends must be avoided, which might excite contraction in the muscles of the abdomen. I was taught this method by Sir W. GULL. There is sometimes the most extreme tenderness when the stomach is affected with cancer; but even then it is generally possible to make out thoroughly the form and relations of any tumour that may be present, if only due pains and care be taken.

The position and form of the tumour produced by cancer of the stomach of course vary greatly in different cases; they are in fact determined by the seat of the growth. If this should occupy the middle of the organ, the left hypochondriac and epigastric regions will contain any mass that is to be felt on manipulation. I remember one case in which two nodular ridges could be clearly made out, corresponding one with each curvature; while between them, towards the back of the abdomen, lay an irregular mass which seemed to occupy the posterior wall. In other cases a more or less rounded prominent mass is felt, which is the thickened anterior surface of the stomach. Dr. CAYLEY has related a case in the *Pathological Transactions* in which the left hypochondrium contained a firm slightly movable tumour which reached below the umbilicus and was supposed to be the spleen, but which proved to be a stomach indurated by a carcinomatous growth in its walls.

When the pylorus is the seat of the cancer the tumour is usually much more definite. In some cases its character can be made out almost as plainly during life as when the interior of the abdomen is exposed in the post-mortem room. It forms a rounded mass, often somewhat lobulated, perfectly circumscribed on all sides except towards the left, where it can sometimes be felt to pass gradually into the wall of the stomach; it may vary in size from that of a walnut to that of a tangerine orange. Its seat is usually a little above and to the right of the umbilicus; considerably lower than the position of the healthy pylorus, which, indeed, lies so completely under cover of the liver as to be inaccessible to palpation. By Dr. BRINTON, the fact that a cancerous pylorus is felt in the umbilical region seems to have been recognized

only in the case of female patients, and he attributed it to the alteration in the position of the viscera caused by the use of stays; but this explanation is clearly insufficient, since the same thing is frequently observed in males. It probably results from the traction exerted upon the lesser omentum by the weight of the tumour. Thus, when that fold of peritoneum is thickened and involved in the growth, or when the pylorus is retained in its normal position by adhesions, no tumour can be discovered. On the other hand it sometimes descends very much lower. Dr. WILSON FOX says that it may be found in the right iliac fossa or even in the pelvis, adhering to the intestine, uterus, ovary, or bladder. I have notes of one case in which a tumour in the *left* hypochondrium, whose exact situation varied at different times according as the stomach was more or less distended, proved to be the pylorus, which had been dragged over to the left side, and was firmly adherent to the parietes and to the edge of the liver. A scirrhous pylorus usually seems to move slightly downwards when the patient draws a deep breath; perhaps the liver, having itself to descend, pushes it down in its turn. Some observers have thought that the movement is rather apparent than real, the truth being that the expansion of the ribs carries the abdominal walls upwards over the tumour; but I feel satisfied that this explanation does not meet the facts.

The tumour caused by cancer of the pylorus often receives an impulse from the abdominal aorta. It is said sometimes to disappear entirely for many days together, this being due either to twisting of the stomach on its axis or to its being overridden by a distended colon. To percussion it should yield a dull note, but when it is of small size this may be masked by the resonance due to the adjacent intestine. I also remember one case in which the tumour formed (so to speak) the roof of a hard-walled ulcer communicating freely with the cavity of the stomach, and in which it distinctly gave a very resonant sound when percussed.

But the results of manipulation of the abdomen in cases of cancer of the pylorus are by no means limited to the discovery of a tumour; one has also to ascertain, if possible, the position and size of the stomach itself. I have already remarked that this organ is often greatly dilated, and descends much lower in the abdomen than under normal conditions; the greater curvature may be below the umbilicus, and may even reach down to the pubes. The organ then resembles a large flaccid bag; and the epigastrium and left hypochondriac regions are deeply hollowed, while the lower part of the abdomen is protuberant. This, indeed, is not by itself proof of dilatation of the stomach, for it is common enough in persons whose small intestines are distended with flatus, if their abdominal walls are also loose and flaccid. What is conclusive is the detection of the peristaltic movements of the thickened organ. If the surface of the abdomen be attentively watched, a wave of contraction may often be seen to start from the left hypochondrium, descend below the umbilicus, and pass on to the right side, and then a little upwards towards the cartilages of the right ribs. Or a rounded protuberance, as large as an orange, may rise up in the left side and travel round to the right in the same way as the wave. In one or two cases I have seen distinct antiperistaltic movements (from right to left) in a hypertrophied stomach. Another indication of enlargement of the stomach is the production of a splashing sound by manipulation of the lower part of the abdomen; but this is not a sign of much value by itself, for similar sounds may be produced from the presence of gas and fluid together in coils of the small intestine. If there should be occasion to pass an œsophageal tube down into the stomach, the end of it may sometimes be felt through the abdominal walls. According to LEUBE, it may, in health, reach as low as the umbilicus; but if it descends below the level of the *crista ilii*, the stomach must be dilated. He lays great stress on this in diagnosis.

It is to be observed that the physical signs of this form of chronic dilatation of the stomach differ in some respects from those of another form, which may be termed acute paralytic distension of the organ, and of which I gave a description in the Guy's Hospital Reports for 1873.

The presence of dilatation of the stomach modifies to a considerable extent some of the other symptoms. I have already mentioned that in ordinary cases of cancer of the pylorus the patient vomits about 3 or 4 hours after each meal, at the time when digestion is completed, and when the food ought to begin to pass on into the duodenum. But when the cavity of the stomach is enlarged, three or four meals may be retained in succession; and the patient, when he does vomit, may bring up surprising quantities of fluid, several pints at a time. I remember one instance in which vomiting never occurred except at night; and in some cases the stomach may reject its contents only at intervals of some days. The matters vomited in cases in which the stomach is dilated also present characters different in some respects from those which are observed under other conditions. They generally consist of a thin highly acid fluid, of a dirty grey, brownish, or greenish colour, which, on standing, becomes covered with a thick frothy yeast-like scum, while it also deposits at the bottom of the vessel a more or less abundant sediment. In the scum, as well as in the fluid, oval spores and beaded tubes of the torula cerevisiæ (or yeast plant) are often found in large quantity; and also in most cases certain little flat rectangular bodies, which most observers believe to belong to another microscopic plant. They are often present in enormous numbers, and have the remarkable peculiarity that they are divided by cross lines into smaller rectangles, some of them into four, others into sixteen, and some even into sixty-four, according to their size. They thus resemble packages tied across again and again by cords; and GOODSIR, who in 1842 was the first to observe them, gave them the appropriate name of *Sarcinæ Ventriculi* (Sarcina-Woolpack). Dr. CHAMBERS has pointed out that they may be found in the dead body in the stringy masses adherent to the interior of the stomach; and therefore he regards this as the appropriate seat for them, and not the liquid which the organ may happen to contain.

Another circumstance that may considerably modify the symptoms of cancer of the stomach is the formation of a gastro-colic fistula. The best account of this affection is that which Dr. MURCHISON gave in the *Edinburgh Medical Journal* for 1857. In almost all such cases the patient vomits fæcal matter; it has been pointed out by Dr. GAIRDNER that the only exceptions to this rule are formed by cases in which there is at the same time narrowing of the pylorus, so that the stomach is constantly kept overloaded with its proper contents. The patient's breath often has a fæcal odour, or he has eructations of intolerable fœtor, or a horrible taste of fæces in his mouth. Much less frequently the effect of the fistula is to allow matters to pass from the stomach into the colon; at any rate, there are only 7 out of 23 cases collected by Dr. MURCHISON in which indigested matters were recognized in the fæces. This constitutes what is termed lientery. It must not be supposed to be of itself a proof that a fistula exists. The attempt has been made to increase its significance by giving food coloured with cochineal to patients who pass undigested matters from the bowels; and by observing what length of time elapses before the colouring matter appears in the evacuations. In a case of SCHÖNLEIN'S this occurred only at the end of 12 hours, in the last of 7 evacuations that took place during the interval. He inferred that the case was not one of gastro-colic fistula, and (with less reason) that the lientery was due to widening of the pylorus. In patients who have an opening between the stomach and colon the appetite is generally very bad, but in one instance there was craving for food. Pain is not invariably present. Indeed, the formation of the fistula sometimes leads to the relief of pain that had before existed.

Returning now to the consideration of the symptoms of cancer of the stomach in general, I have to add that towards the fatal termination of the disease they often subside to a

very great extent. I have notes of one case in which vomiting did not occur once during the last month of the patient's illness. Fresh symptoms, however, often arise; ascites, from extension of the cancerous growth to the peritoneum, or from compression of the portal vein; jaundice, from interference with the common bile-duct; œdema of one or both of the lower limbs, from thrombosis of the corresponding femoral or external iliac vein or veins. In some cases the patient lies for several days before his death with cold blue extremities and with a scarcely perceptible pulse, but suffering no pain.

The duration of cancer of the stomach cannot be stated with precision, because we have no means of fixing the date of its commencement. But it seldom fails to destroy life within a short period from the time of the first appearance of well marked symptoms. Dr. BRINTON estimated this period as amounting on an average to 12½ months. NIEMEYER says that the disease generally proves fatal in from 5 to 15 months. Dr. WILSON FOX says that the most rapid case he can find recorded is one by Valleix, in which death occurred in four months. But at Guy's Hospital three cases have occurred, in which the duration of the symptoms was stated at one month, eight or nine weeks, and three months respectively. The longest case mentioned by Dr. Fox was one in which the patient lived 3½ years after the appearance of the first distinctive symptom; but he cites from ABERCROMBIE the case of Napoleon the First, who had paroxysms of severe pain for nine years before his death. One remarkable case is recorded at Guy's in which the patient had suffered for seven years from symptoms of disease of the stomach.

That the *Diagnosis* of cancer of the stomach is often a very difficult matter must be sufficiently evident from what I have already stated. There are, indeed, some cases in which the most acute observer cannot do more than suspect the presence of such disease. The only rule which I can lay down is that whenever symptoms of dyspepsia come on without apparent cause in a patient over 40 or 50 years of age, and are accompanied with great and rapid loss of strength and of flesh, the possibility that cancer of the stomach may be developing itself must always be borne in mind.

Even when the symptoms point clearly to the existence of serious organic disease of the stomach, there always remains the question whether this disease is simple chronic ulcer or cancer. Between these affections the diagnosis is often perfectly easy. In very young persons, malignant disease of the stomach may be dismissed from consideration. It scarcely ever occurs except in the form of a sarcomatous growth, generally affecting also the ovaries, and attended with ascites, while it produces comparatively slight gastric symptoms. And in older individuals there are many points of distinction. In cases of ulcer, the pain and sickness bear a much closer relation to the time at which food is taken than in those of cancer. Vomiting of blood in considerable quantity is much more apt to occur at an early stage of the disease, and life is prolonged to a much later period. Any case in which well marked symptoms have existed 18 months or longer may generally be pronounced to be one of simple ulcer and not of malignant disease.

On the other hand, cancer of the stomach may for the most part be diagnosed whenever a tumour is discovered having the characteristics above described. Cases of simple ulcer affecting the pylorus have indeed been placed on record, in which this part has been so thickened and indurated that the presence of a scirrhous mass has been simulated. And when an ulcer occurs at this part of the stomach it tends, when it heals, to narrow the orifice, and so may give rise to further symptoms resembling those which result from cancer. Dr. BRINTON says that he has met with one or two cases in which during the whole progress of the disease there was nothing to justify a positive diagnosis.

In considering the diagnostic value of pyloric tumour, I must further mention that it is sometimes present when there are no other symptoms of gastric disease. Sir THOMAS WATSON relates a case in point. A young woman had a pulsating tumour in the epigastrium which was at first supposed to be an aneurism, and afterwards a mass of fæces in the colon. She had no sickness nor any gastric symptom. The tumour proved to be a cancerous growth in the stomach; it lay in front of the abdominal aorta.

On the other hand it must not be forgotten that in many cases of cancer of the stomach and even in some cases of cancer of the pylorus, no tumour is at any time to be discovered.

With regard to the *treatment* of cancer of the stomach there is very little to be said. It is important that the patient's strength should be saved as much as possible; and on this account the range of food should not be too strictly limited. The patient must not be subjected to the starvation plan of treatment recommended for cases of simple gastric ulcer. Alcoholic stimulants may be allowed in small quantities.

Medicines are required only for the relief of particular symptoms. The treatment of gastric pain, of vomiting, and of hæmorrhage, must be the same as when they depend upon any other cause.

For the vomiting of liquid which forms a yeast-like scum and which contains sarcinæ, Sir THOMAS WATSON recommends common salt, creosote, and the sulphites or hyposulphites. The last named remedies were first suggested by Sir W. JENNER. The dose of them is stated at from fifteen to thirty grains, which should be taken soon after meals.

But the presence of sarcinæ in the vomited fluids is, in most cases, an indication that the stomach is in a state of chronic dilatation, and this is a condition about which there is still something to be said. I have already mentioned it as an effect of cancerous disease of the pylorus, and have described the physical characters by which it may be recognized. It may also follow the cicatrization of a simple ulcer affecting the pyloric region. Those writers who admit that the pylorus is liable to a simple hypertrophy regard this as another occasional cause of dilatation of the stomach. Paralysis of the muscular coat limited to the pyloric portion is also mentioned by Dr. WILSON FOX, who quotes two cases from ANDRAL in which the stomach was greatly enlarged without there being any actual narrowing of the pyloric orifice. But in one of these instances there was extensive ulceration of the pylorus; and in the other its walls were indurated, although the muscular coat was atrophied. And even in cases of cancer affecting the pyloric orifice it not rarely happens that after the ordinary symptoms have developed themselves and progressed to a fatal termination, it is found on post-mortem examination that the finger can be readily passed into the duodenum. Evidently, then, the outflow of the contents of the stomach may be arrested without there being an actual closure of the channel.

Still, on the other hand, I think it is doubtful whether this kind of chronic dilatation of the stomach ever occurs independently of obstruction of some kind at the pyloric orifice. Writers mention hysteria, hypochondriasis, and diseases of the nervous centres as possible causes. Dr. HODGKIN pointed out that the organ is often very large in Indians, who eat enormous quantities of vegetable food. BAMBERGER says that it may be due to dragging down of the stomach by an omentum adherent to a hernial sac.

The exact determination of the various possible causes of chronic dilatation of the stomach is becoming a matter of considerable importance, in consequence of the success which has recently been attained in cases of this kind by the *systematic use of the stomach-pump*. This *treatment* was first proposed by Prof. KUSSMAUL, of Freiburg, in 1868. A tube should be introduced into the stomach every day. As much of the contents as will come away readily should first be withdrawn. Some tepid water is then to be injected, and afterwards to be pumped out again, and the process should be repeated two or three times until what returns is almost clear. Weak solutions of carbonate of soda, or of permanganate of potass, or even of creosote, may also be thrown into the

stomach in some cases. This plan has been tried in a few instances at the Hospital and with decided success. And Dr. SCHLIEP has recorded some other cases of the same kind in the Clinical Society's Transactions. The first introduction of the tube is exceedingly disagreeable to the patient; but before long he becomes accustomed to it; and he is even glad to pass it himself, so great is the relief which he experiences from its use. The vomiting often ceases entirely; there may be great diminution of pain; the appetite improves considerably; the patient becomes much more cheerful; he regains much of the flesh and strength that he had lost, and he is no longer troubled with constipation. Such striking results are not indeed to be looked for in those cases in which dilatation of the stomach is the result of cancerous disease of the pylorus.

GUY'S HOSPITAL GAZETTE, *SEPTEMBER*, 1876.

THE welcome vacation—appreciated we dare to say quite as fully by the closest workers in the wards, as by those to whom the cricket-bat has a more familiar feel than the scalpel,—is already well advanced; the dissecting and lecture rooms are quiet and deserted, and, except the few who hold appointments which force them to remain immured, our fellow-students are far away enjoying their well-earned rest with all the pleasant consciousness of work done.

Most cordially do we wish our friends and readers the fullest enjoyment of their holiday in whatever fashion they may choose to take it; whether they are seeking amusement among the quaint sleepy little hamlets of the Rheinland, climbing peaks to stand for a moment

> *"Where things that own not man's dominion dwell*
> *And mortal foot hath ne'er or rarely been,"*

or whether they prefer to spend their vacation less ambitiously at home "speaking their poetry in the bosom of their families"—in either case, they have our best wishes; only with regard to the "poetry" we should like humbly to venture the suggestion, based upon much observation, that the theory of Mons. Jourdain is unworthy of their belief, and that communications which have now and then been received by the Gazette are not "poetry" by any means, as also with equal certainty they are not "prose."

On looking back at the past year's work at Guy's, we think we have much reason to be satisfied with the general results. The table below will show how we stand at the College Examinations (for it is upon these that our reputation must chiefly depend) in comparison with the other Metropolitan and Provincial Schools.

At the Primary Examination the numbers are as follow:—

Medical School.	Totals	Number passed.	Number rejected.	Proportion of rejections.
St. Bartholomew's... ...	98	73	25	1 in 3·96
Guy's	87·50	60	27·50	,, 3·18
University College... ...	78·50	45	33·50	,, 2·34
St. Thomas's	57·50	35·50	22	,, 2·61
London	48·66	20	28·66	,, 1·70
King's College	37·50	26	11·50	,, 3·26
St. George's	33	20	13	,, 2·53
Middlesex	18·50	14	4·50	,, 4·11
St. Mary's	16·50	10	6·50	,, 2·53
Westminster	16·16	8·83	7·50	,, 2·17
Charing Cross	9·50	4	5·50	,, 1·72
Manchester	32·50	23	9·50	,, 3·94
Liverpool	25·66	13·83	11·30	,, 2·20
Birmingham	24	19·50	4·56	,, 5·33
Edinburgh	19·66	13	6·66	,, 3·05
Leeds	19	10	9	,, 2·11
Newcastle-on-Tyne ...	13·50	9·50	4	,, 3·37
Dublin	11·83	6·66	5·50	,, 2·15
Bristol...	9	1	8	,, 1·12

Thus we see that Guy's is fourth among the Metropolitan Schools, although if we count those in the provinces as well we stand seventh; but this would be obviously an unfair view of the matter, for such a school as that of Birmingham whose total of men is 24, cannot certainly compare with ours which sends up 87·50. In the same way Middlesex, which only sends up 18½ men heads the list; but we must admit to having been beaten by St. Barthalomew's, which comes third with the large total of 98 men.

The following are the results of the Pass-Examinations for the year:—

Medical School.	Totals.	Number passed.	Number rejected.	Proportion of rejections.
University College... ...	78·91	66·58	12·33	1 in 6·39
Guy's	77	59	18	,, 4·37
St. Bartholomew's... ...	63·75	49·75	14	,, 4·55
St. Thomas's	41·41	35·58	5·83	,, 7·10
King's College	34	18	16	,, 2·12
St. George's	27·50	22	5·50	,, 5·00
London	21·50	16·50	5	,, 4·30
St. Mary's	18	12·50	5·50	,, 3·27
Middlesex	15	10	5	,, 3·00
Charing Cross	11·50	8·50	3	,, 3·83
Westminster	3·66	2	1·66	,, 2·20
Edinburgh	17·50	14	3·50	,, 5·00
Manchester	15·50	10·50	5	,, 3·10
Liverpool	13·83	9	4·83	,, 2·86
Leeds	13	6	7	,, 1·85
Birmingham	11	7	4	,, 2·75
Bristol	7·83	6·33	1·50	,, 5·22
Newcastle	5·75	3·25	2·50	,, 2·30
Cambridge	5·50	5	·50	,, 11·00

At the last of these in July our men did exceptionally well, although some previous failures have brought

down our average to the fifth place on the list; quite an unwonted and unaccountable position for us, unless it be explicable by the fact that some of our past brilliant successes have given us undue confidence. Be this as it may, the "final" Examination at the College would be all the better if it were a little less "flukey" (a term which seems to have been especially coined for application to the proceedings of the College Examiners); for men are not seldom "plucked" who have the confidence of their teachers, while still oftener others get through who have, during their Hospital career, apparently divided their time with great impartiality between the Billiard-room and Five's-Court. Such a state of things it is of the last importance to amend, or the prestige of the College, though yet high, will inevitably suffer.

That we are fourth in the list of the Primary Examinations is perhaps not so wonderful. Since last year, when we were very successful, the Examinations have been changed in an important respect. An extra ten minutes *viva voce* has been allowed for Physiology, the one branch of our studies which at Guy's seems to be almost neglected. The First-College man while he is crammed with anatomy *nolens volens* in the dissecting room and at class demonstrations, is left to pick up his Physiology as best he can, for the lectures, however admirable in their way, obviously cannot take the place of class teaching. The training the 1st M. B. men undergo is far more complete, and if, as we believe, this is to be extended to the college, the men will in future fear the Physiology table as little as the others. In any case it is the Juniors and Freshmen who will in future examinations keep up the reputation of Guy's, and to their care we confide the prestige of our noble school.

NOTES OF THE MONTH.

M. Linhart, a surgeon in the Austrian navy, communicated a case of anæsthesia by intravenous injection of chloral in in order to reduce a fracture of the humerus. Seven grammes of chloral were injected in fourteen minutes. Anæsthesia lasted for half an hour without sickness or any accident whatsoever.

MISS JULIA SINCLAIR has just been admitted as Doctor of Medicine at the University of Zurich.

The annual report of the Royal College of Surgeons has been just published. The entire number on the College lists amounts to 402 fellows, and 2,743 licentiates. Of the latter no less than 300 belong to the Army Medical Service.

A monument of Herbart the great psychological philosopher, has been unveiled ot Oldenbury.

Dr. Q. C. Smith extols, in the *Pacific Medical and Surgical Journal*, the following dressing as the best for burns.

Mix subnitrate of bismuth with pure honey until it forms a thick paste. Spread the mixture plentifully over the burned surface and the parts near adjoining as soon as possible after the burn occurs. Then cover the parts thickly with cotton-wool wadding and bind closely. In the majority of cases this dressing should not be removed for three or five days, when the parts should be immersed in water until the dressing is very soft and easily removed. The same dressing should be immediately renewed.

DR. BURDON-SANDERSON and Dr. Gerald Yeo are about to make a scientific investigation into pleuro-pneumonia and foot-and-mouth disease.

Mr. Lowe, the *Spectator* observes, is never tired of inveighing against the principles on which his own education was conducted, and seldom fails to do so without discharging some shaft with which that education furnished him, against the character of that education. Like the eagle whose wing feathered the arrow which was destined to pierce its own heart, Mr. Lowe gives to the eloquent and clever sarcasms which he hurls at the education in which he distinguished himself so brilliantly, all their steadiness and sureness of aim, by availing himself of the stores of learning to which that teaching introduced him. He quotes Greek to show how unfortunate a blunder it is to waste time on teaching boys Greek when they might learn science, and borrows from the wit of the ancients what he needs to give impressiveness to the wit of a modern, in running down the disposition to steep boys' minds in the stores of antique wisdom. It is an exceedingly hazardous thing to predict what might or might not have happened to Mr. Lowe if he had got a good grounding in science and modern languages and history, instead of in logic and ancient languages and ancient history. We feel strongly inclined to suspect that it is primarily the classical training of Mr. Lowe which has rescued his strong but not very comprehensive mind from the oblivion which might otherwise have fallen upon him, if his character had not been elevated by the finer feelings and touched by the lighter thought of a high classical education. But for that education he might, as likely as not, have been the thriving senior partner in Robert Lowe and Co., the great Indian and Australian outfitters—a man well-known in his little mercantile circle (though not beyond it) for a biting tongue, and a keen and trenchant, but often very risky judgment, instead of as a politician of the first rank, and an orator who, if not of the first rank, is yet feared, and admired for his power to excite fear. Mr. Lowe is not the only man in the world who is ungrateful for what may have really been the best stroke of fortune in his life, but at least he is one of those who ought to have more of the sagacity to see how useful his education has actually been to him, than ninety-nine men in a hundred who utter the same complaints. Mr. Lowe, without his Winchester and Oxford life, would probably have been—to the world at large, at all events—like the astronomer without his calculus, or the engineer without his steam.

IN MEMORIAM.

H. L. CHAMPNEYS, M.R.C.S.

We briefly noticed in our last issue the sad and sudden death of our late fellow-student, Mr. H. L. CHAMPNEYS. He had for a week or more been cruising about in a yacht as medical attendant; and, at a time when he was thought to be enjoying himself, we received the sad news of his death. It appears that for some days he had been ailing, but, as is often the case with medical men, thought nothing of symptoms which must have pointed to some intestinal mischief; for on the Sunday (July 23rd) he walked a distance of at least three miles. Grave symptoms of intestinal obstruction quickly ensued, and he died on Wednesday evening, July 26th, at Cowes, having been landed from the yacht at his own desire a few hours before. He remained perfectly conscious to the last moment.

Mr. CHAMPNEYS entered Guy's in October, 1870. He matriculated at the London University in 1872; passed the Preliminary Scientific in 1873, and the first M.B. in 1874. In July, 1875, he was admitted a Member of the Royal College of Surgeons. Besides the usual appointments he had been Obstetric Resident, and no doubt had he lived, and so desired, he would have been appointed to the House-Surgeoncy.

Mr. CHAMPNEYS was a man of far more than ordinary ability, and his lamented death has not only deprived many of a valued friend, but we feel has taken from the profession one who would have occupied in it a prominent position.

Personally he was always kind, and especially in the walks of his profession; so that those under his care have often expressed, in our hearing, gratitude for his kindness. To those of his fellow-students who happened to be ill or in difficulty he ever showed a sympathy and kindness, which could only be appreciated by those who experienced it. But, alas! at the early age of twenty-two a promising member of our profession and a valued friend has been taken from our midst, and memory alone is left to remind us of all his goodness.

NOTES OF A

Clinical Lecture

BY C. H. GOLDING-BIRD,

ON THE USE OF ELECTRICITY IN SURGERY, AND SPECIALLY OF THE CONTINUOUS CURRENT AS A CAUSTIC.

Last week we considered the caustic action of the continuous current; to day I wish to mention the various uses for which it may be employed.

The course taken by the electric current shall be first considered. If a plate of zinc and a plate of silver be placed in dilute sulphuric acid, no action will take place as long as no contact occurs. If, however, the two be brought in contact bubbles of gas evolve near the silver, the current passing from the zinc or more oxidisable plate to the silver which is less oxidisable. The more oxidisable plate is termed the positive, the less oxidisable the negative plate, while the electrode in contact with the positive plate (zinc) bears the contrary name of "negative," and the electrode in contact with the negative plate (silver) of "positive." The current passes up the bubbles, along the wire, and thus back to the zinc plate.

That a current is passing through the wire may be proved by placing it close to a magnet which will be seen at once deflected.

A solution of common salt may be taken instead of the acid with the same result, and carbon is taken instead of silver in some batteries to form the electro-negative plate.

Water, H_2O, is oxide of hydrogen, a true salt, and may be decomposed by the electric current; oxygen being, as it were, the acid, and hydrogen the alkali. Oxygen is found to go to the positive electrode, being therefore termed an electro-negative element, while hydrogen goes to the negative electrode being electro-positive.

If a solution of sodic chloride be taken, or the serum of the human body instead, the same occurs, chlorine going to the positive, sodium to the negative pole.

Two things must be remembered with respect to the current:—

Firstly—Before you can generate the current you must have the salt through which the current is passed in a fluid condition, not necessarily dissolved in water, but fluid it must be.

Secondly—The fluid must be capable of decomposition and be a conductor of electricity. Thus pure water is not a conductor and must be made so by adding a few drops of sulphuric acid. If iodine is used instead of chlorine the decomposition will be more evident. Thus if the current be passed through a solution of iodide of potassium containing starch, iodine is set free, and the blue iodide of starch will be formed.

Test paper would again prove that decomposition takes place by the alkaline reaction of the fluid at one (the negative) electrode, and the acid reaction at the other (the positive) electrode.

If passed through the human body the current will have the same chemical effect, and thus it is that under the negative electrode when the alkali is liberated, an actual destruction of the tissues will after a time take place, if the current be powerful or its action prolonged. This would be one of the two destructive actions of the current that I have already referred to. Under the positive electrode where the acid of the electrolyte appears, a stimulating action on the nutrition of the part to which it is applied is evident. The following case illustrates the point well, and will show you the value in certain cases of the electric current upon the process of repair.

C. K., æt. 54, under Mr. DURHAM'S care in Martha, is the subject of inherited syphilis, and has now over the anterior part of left leg three ulcerated places, two quite small; the other, two or three inches in length. Iodide of potassium has been administered since May 12th, and lot. Nigra has been used as the dressing.

June 7th.—The surface of the granulations level with the skin. There is a blue cicatricial line all round. Granulations small, bloodless, pale, ashy colored. (This condition having existed for some time, the following treatment was adopted to stimulate healing more effectually than the lotion.) To part of the ulcer two sponges were applied, and connected with three cells of a small zinc and silver battery suspended beneath the bed. The negative electrode was attached to the upper sponge. The sponges were covered with gutta-percha and were soaked in salt water.

8th.—Ulcer, where covered by the sponges, red, bleeding and bossy, from granulations having grown round the interstices of the sponge. The part of the ulcer between the two sponges and the smaller ones in the neighbourhood, unaltered. Sponges re-applied.

9th.—Sponges removed. Ulcer as on last occasion. Healing well at edges.

14th.—Two sponges were finally removed; a thoroughly healthy action being apparently established.

The subsequent history of this case is that from the 16th of June, Iodiform ointment was applied, and on July 3rd the patient was discharged well, only a very small spot remaining open.

Under the head of alterative action I have placed that class of cases benefited by the application of the continuous electric current in one way or another; but whether as the direct result of its electrolytic action, or from some more subtle influence it exerts upon the vitality and nutrition of the part, is not in every case believed.

Such cases are those of aneurism, where the endeavour is to promote coagulation; nævi, where coagulation occurs at the time, and a subsequent shrinking and cicatrization of the growth; solid tumours or cysts where a gradual diminution in bulk and finally complete disappearance sometimes may be obtained; and lastly in hydatid cysts. These I have put alone, and not with the other cystic tumours; for their life being independent of the life of their host, the action in them of the current is to destroy their vitality, and then their fluid contents being absorbed, nothing remains of the expanded cyst but now shrivelled cyst or cysts, and so the disease is cured.

The battery used in this hospital is the Cruikshank, of which 15 cells are employed at a time. This is sufficient battery power to decompose water rapidly, but if the tumour be solid a more powerful electromotive force is necessary. By two wires the connection is made with the patient; the positive electrode, ending in a sponge dipped in salt and water, is placed on the skin; while the negative—a platinum needle—is thrust into the tumour. This is what you usually see done here; but I think that this mode of operating must account for the want of success that has attended our electrolytic treatment of tumours. We have not only lost in many cases where it was essential, the coagulating power that resides in the acid developed at the positive electrode, but by placing it external to the tumour we add so much resistance to the current that all our apparent power is not in reality being utilized. The maximum effect is produced where both electrodes end in platinum needles and where both are thrust into the tumour, but not allowed to come in contact. One caution is necessary: if a powerful current be employed, or if for a long time, the negative needle, where it passes through the skin, should be protected by some non-conductor or disentegration of the skin will result.

A case of hydatid of the lung was till lately in the wards. The patient, æt. 49, was in Philip ward, and had had symptoms of chest trouble long before he entered here. No very clear diagnosis was arrived at until some small fluctuating projections began to appear between the ribs in the left side; several of these from time to time were seen, and on puncturing, I drew off on several occasions the clear fluid characteristic of hydatid disease. Having to deal not with a single cyst but with a multiple condition, I was determined to use the electrolytic puncture. Two platinum needles (negative electrode) were therefore thrust into the dullest part of the chest a few inches from each other, while the positive electrode—a wet sponge—was applied to the skin. The action of the battery was maintained for 20 minutes. No pain was given and no inconvenience followed; and as the patient eventually came to the P.M. room from suppurative peritonitis, we were able to examine the lung. It proved to be, as was expected, simply riddled by the hydatid cysts, most of them still alive. That part of the lung where they were shrivelled and dead was where the puncture had been employed. Had the treatment then done its part? I hope so; I can say

no more, inasmuch as the portion of the growth operated on was the oldest, and, therefore, in the ordinary course of events would have died first.

Dr. DUNCAN records cases of subcutaneous nævi successfully treated by the continuous current, but my success in this treatment has not, as yet, been encouraging, though perhaps by a more powerful battery better results might be obtained.

In one case a small nævus on the tip of the nose was thus treated with success, but since the nævus was only of the size of a split pea, and the needle was passed through it, the cause was very possibly the passage of the needle through the nævus and not the current.

In a second case a large subcutaneous nævus on the nose was treated in the same way, but without success. The cause of the failure was perhaps from the negative electrode alone being introducedinto the nævus, whereas if the positive had been introduced also the result would probably have been better.

Dr. ALTHANS especially recommends the current for the cutaneous nævi, but having no depth the passage of the needle through them must so destroy the vessels as to help in no inconsiderable way to produce a good result.

On a great many occasions you may have seen subcutaneous nævi in the electrifying-room submitted to the action of the continuous current; but hitherto the cases have not turned out so well as to justify me in calling the treatment on the whole successful. That these growths are however amenable to this treatment is certain, successful cures being from time to time recorded in the different journals.

Mental Diseases.

By Dr. G. H. SAVAGE, OF BETHLEHEM HOSPITAL.

NOTES ON LECTURE III.

Acute mania is not a distinct disease, only a form of mental disease. Whatever its cause it is generally preceded by a period of depression of variable length. Acute mania may be mistaken for delirium of fever, delirium tremens or inflammation of the brain; the history is very important as the incoherence and violence may be alike in all. It is unusual to get any marked increase of temperature in acute mania unless there is some complication.

For convenience we shall consider five separate kinds or conditions of acute mania. 1st, simple acute mania following a melancholy stage. 2nd, acute mania occurring in persons already weak minded. 3rd, acute mania connected with epilepsy. 4th, maniacal attacks due to some cause of anœmia. 5th, ordinary recurrent mania and cases of "folie circulaire." In all the symptoms are similar to a great extent. The melancholy stage may be pronounced as only one of hypochondriasis. Often the patient is restless and has a tendency to wander, sleepless, and with a bad appetite. The passage from depression to mania may be rather sudden but is often gradual, so that for a few days the friends believe the patient is getting well.

Mania generally first shows itself in excess of energy, and extravagance of will and action, the patients are loquacious and boastful, the voice often becomes changed; we have two patients in Bethlehem who sing rather well when maniacal but not when well; as a rule the voice is harsh. We meet generally destructive energy associated with cowardice; there is loss of interest in the surroundings and often a loss of decency. Rapid alternations from grave to gay for a time; the patient may control his impulses, a maniac's acts are impulsive, not rational. We must not judge of a man's sane disposition from his insane one; in fact, persons who have spent a life in self restraint and self denial may exhibit the most repulsive want of control when insane. A maniac is often very emotional, occasionally patients are really brillant when mad, I have known a man compose witty poems when maniacal who is quite incapable of such productions when sane. Rapid punning is not uncommon as well as a power of looking rapidly all round verbal relationships. More commonly there is a rapid bubbling up of ideas which are connected first with one and then with another surrounding, the ideas are partly provoked by surroundings and partly by hallucinations and delusions. Incoherence is the chief symptom, often we meet a feeling of unlikeness to the old self and a misinterpretation of it; hence we get exalted ideas.

There is no persistence among these, the patient often contradicting himself. The reasoning powers are at times seen to be intact outside the special disorder, and the patient may for a moment be recalled to his senses. Memory may be perfect for the past and may exist of the present, though the memories are somewhat masked.

Hallucinations are sometimes present and aggravate the symptoms. Illusions or false interpretations are more frequent, thus a patient sees in each fresh person some old friend.

In acute mania the patient's general health is usually impaired, the appetite is variable, often voracious, peculiar morbid appetites are common, one patient eating fæces and another earth. There is often a peculiar epigastric uneasiness that may lead to excess in drink, the tongue is foul, more often furred than dry, the breath is often very offensive. I have known this foul breath and sleeplessness regularly warn friends of a coming attack. The head feels hot, and yet I cannot say if it is really so; the general circulation is feeble or irregular. I have hardly ever got a powerful pulse tracing in mania, though I have taken all cases in Bethlem for some years. The complexion is sallow, there is generally constipation and not unfrequently the purge given soon after admission seems to produce wonders, such improvement is temporary. Menstruation is irregular or absent, the urine is of high specific gravity and has commonly excess of uric acid. There are in some cases marked tremors in the muscles, much more marked than in early general paralysis. In some cases there is great loss of common sensibility and the patients expose themselves to excesses of heat or cold. I have known a girl thrust her finger into a rat hole and hold it there till an inch was bitten off, and yet she had no pain. Again, women have been delivered during mania and have given no signs of pain.

Hyperœsthesia is a very rare symptom in mania.

Maniacs expose their bodies and tear up their clothes from many different reasons, some due to morbid sensations.

I believe few patients have a real increase of strength, but many have an endurance that is astonishing; the persistent way they will knock at their bed room door hour after hour or sing night and day is noteworthy.

You will find each case of mania with its own pecularities, the more violent cases as a rule are more rapidly over, those that have slowly developed either from depressed or exalted states are unfavourable. Some cases pass from excitement to a stage of dulness or depression, and then gradually convalesce, other cases improve for a time and then relapse; and, again improve to relapse once more, each succeeding relapse being shorter or less acute if the case is favourable.

It is rare to see sudden cure in acute mania. I have seen one lady subject to recurrent fits of mania who says she feels clear and well in an instant as if light suddenly broke through the clouds. In cases that improve, sleep, as a rule, becomes natural. Sound sleep does not necessarily mean recovery. Some cases sleep from exhaustion to be only more noisy after it. A large proportion of cases of acute mania recover, certainly over 60 per cent. in Bethlem. A few die of exhaustion, in some cases from a kind of collapse after the excitement, this is more common in young persons. I have the brain of one such case that shows inflammation of the membranes. Other cases die from diseases such as phthisis that are possibly the cause of the mania. I have seen cases die of pyœmia due to self inflicted bruises.

Mania is sometimes cured never to recur, other cases are subject to constant recurrences. We have cases that at once became maniacal when reduced in general health, such cases may have attack after attack and get well even in extreme age. We recently had an acute maniac of nearly eighty who recovered. Some cases after one attack of no special severity pass into weakmindedness, either becoming chronic maniacs or dements. Other cases have many severe attacks that leave no mental weakness.

In treating mania you must treat the general conditions, it is useless to attempt to quiet cases with opiates and chloral, which, even if they produce quiet, rarely do any good.

Open purge is generally useful as a first step, abundant fluid nourishment is necessary and stimulants are not contra-indicated if food is refused. The stomach pump or feeding by the nose may be necessary.

Bromide of Potassium alone or with Cannabis Indica in a few cases does good. Belladomia and Hyoscyamus have given quiet in a few cases. I have found Camphor combined with Chloral Hydrate in 10 grains improve some cases, giving rest and increasing the appetite. I have given these drugs in syrup. Shower baths and warm baths with cold effusions to the head give rest sometimes.

Although sedatives are not curative we are often forced to use them to prevent complete exhaustion.

In our next we shall refer to some typical cases of each class of mania.

Correspondence.

TO THE EDITOR.

SIR,

Everybody, at one time or another, must have experienced the loss of time and temper whilst waiting to "go round." It is, of course, impossible for the staff always to be in the Hospital punctually. To avoid, as far as possible the inconvenience arising from this, might I suggest that a shifting board, like that in the Colonnade, be fitted-up in the Library with a speaking tube running between there and the Porter's Lodge; or an electric bell similar to the one now in use between the two lodges.

The cost to the Hospital would be but little, the gain to the Students *much* by many an half-hour's reading; with, in the winter, the additional advantage of being in a comfortable room instead of "hanging about" in the cold whilst *waiting to go round.*

Yours, &c.,

X.Y.Z.

P.S.—A clock in the new museum would be a great boon to many a man reading for his First College.

July 21st, 1876.

TO THE EDITOR.

Guy's, *August 15th*, 1876.

DEAR SIR,

Allow me to call your attention to the highly unsatisfactory plan adopted for the distribution of the monthly copies of the *Gazette*. They lie in the Porter's Lodge, inconveniently crowding his window, exposed to dust and dirt, and quite handy to anyone who may possess the combination (by no means rare in London) of a literary mind with predatory habits. That many of the papers disappear is doubtless partly the fault of their owners, some of whom allow them to lie in the Lodge for weeks at a time; yet, as gentlemen must necessarily be out of town now and then, a remedy can hardly be found for this. Would it not be better to have a shelf erected in the Library expressly for the *Gazette?* It would be less exposed there than in the lodge, and might be placed to some extent under the protection of Lingford (though the advantage of that part of the arrangement would be less obvious); in any case the men would find their papers in better condition, and they would be in no one's way.

I am, SIR,

Yours truly,

SILAS WEGG.

TO THE EDITOR.

Guy's, *August 20th*, 1876.

SIR,

But few of your readers will be surprised to hear that the potent and mysterious Spirits who administer the educational affairs of our *Alma Mater* have reconsidered their decision with regard to the money prizes of the second and third years, and with the result that the unfortunate "redistribution" of last year has been amended in a manner that could leave but little to be desired.

But the amendment—although a perfectly just and laudable one—comes both ungracefully and tardily; ungracefully because it was urged upon its authors by the cogent reasoning that their position was utterly untenable, and tardily because had it appeared sooner several more men would have competed for the prizes to which it had reference. For these individuals reparation has unfortunately come too late; yet to the students as a body the affair has not proved an unmixed misfortune. For if the amendment is to be a permanent one—a matter upon which, in view of recent events, no prudent man will venture to give an opinion—the sum total of our money prizes will be materially raised. Meanwhile we fear that, whatever be done now, those who are responsible for these changes will hardly have gained much by them—even in dignity.

I trust, Sir, you will have the courtesy to print this letter, especially as you cautiously abstain from "identifying yourself with the opinions of your correspondents."

I am, SIR,

Yours truly,

JUSTITIA.

ON DUTY FOR SEPTEMBER.

House Physicians—Messrs. H. F. Lancaster and C. J. Symonds.
Junior House Physician—Mr. A. Finch.
House Surgeon—Mr. E. Amphlett.
Junior House Surgeon—Mr. H. N. Smith.
Senior Resident Obstetric—Mr. F. C. Coley.
Junior Resident Obstetric—Mr. St. C. B. Shadwell.

DRESSERS FOR THE WEEKS BEGINNING.

September 6th—Mr. Evans (Mr. C. Forster).
" 13th—Mr. L. H. Stevenson (Mr. Bryant)
" 20th—Mr. A. M. Turner (Mr. Durham)
" 27th—Mr. J. C. Wilkinson (Mr. Howse)

STATISTICAL REPORT OF LYING-IN CHARITY FOR JUNE, 1876.

Number of women attended			231
Recovered	230		
Died	1		
	231		
Women attended in 1st confinement			35
„ „ 2nd „			33
„ „ 3rd „			48
„ „ 4th „			25
„ „ 5th „			26
„ „ 6th „			17
„ „ 7th „			15
„ „ 8th „			9
„ „ 9th „			13
„ „ 10th „			4
„ „ 11th „			2
„ „ 12th „			1
„ „ 13th „			1
„ „ 14th „			2
			231
Full time children.			
Males alive	145		
„ dead	7		178
Females alive	108		
„ dead	5		
Premature deliveries, 6 to 8 months.			
Males alive	0		
„ dead	0		1
Females alive	0		
„ dead	1		
			180
Number of dual births			5
Single			226
			179
Presentations.			
Vertex		225	
Breech		5	
Face		2	
Foot		4	
		236	
Operations.			
Forceps	2		
	2		

Externs:—Messrs. Edward Lynn. R. Sianley Taylor, E. R. Morse, F. M. Godde Smith, James Osborne, Geo. Pilkington, D. D. Malpas.

Resident Obstetric Assistants:—Mr. J. Weston Bull, Senr., Mr. M. Lubbock, Junr.

GUY'S HOSPITAL. — The Medical Session commences on Monday, October 2nd.

MEDICAL OFFICERS.

Consulting Physicians—Sir W. Gull, Bart., M.D., D.C.L., F.R.S.; G. Owen Rees, M.D., F.R.S.
Physcians—S. O. Habershon, M.D.; S. Wilks, M.D., F.R.S.; F. W. Pavy, M.D., F.R.S.; W. Moxon, M.D.
Assistant Physicians—C. Hilton Fagge, M.D.; P. H. Pye-Smith, M.D.; Frederick Taylor, M.D.
Consulting Surgeons—J. Hilton, Esq., F.R,S.; E. Cock, Esq.
Surgeons—J. Cooper Forster, Esq.; Thomas Bryant, Esq.; Arthur E. Durham, Esq.; H. G. Howse, M.S.
Assistant Surgeons—N. Davies-Colley, M.C.; R. Clement Lucas, B.S.; C. H. Golding-Bird, M.B.; W. H. A. Jacobson, Esq.
Consulting Obstetric Physician—Henry Oldham, M.D.
Obstetric Physician—J. Braxton Hicks, M.D., F.R.S.
Assistant Obstetric Physician—A. L. Galabin, M.D.
Ophthalmic Surgeon—C. Bader, Esq.
Assistant Ophthalmic Surgeon—C. Higgens, Esq.
Dental Surgeon—S. J. A. Salter, M.B., F.R.S.
Assistant Dental Surgeon—H. Moon, Esq.
Aural Surgeon—W. Laidlaw Purves, Esq.
Medical Registrars—Frederick Taylor, M.D.; J. F. Goodhart, M.D.
Surgical Registrar—Frederic Durham, Esq.
Apothecary—James Stocker, Esq.

The Hospital now contains 695 beds, and includes wards for obstetric, ophthalmic, and other special departments.

In connection with the Lying-in Charity, about 2,500 cases are annually attended by the Students.

Number of Patients relieved during the year, about 91,000.

LECTURES, DEMONSTRATIONS, & PRACTICAL COURSES.

Medicine—Dr. *Habershon and Dr. Wilks.*
Clinical Medicine—Dr. Habershon, Dr. Wilks, Dr. Pavy, and Dr. Moxon.
Surgery—Mr. Bryant and Mr. Arthur E. Durham.
Clinical Surgery—Mr. Forster, Mr. Bryant, Mr. Durham, and Mr. Howse.
Practical Surgery—Mr. Davies-Colley.
Clinical Lectures on Midwifery and Diseases of Women—Dr. Braxton Hicks.
Morbid Anatomy—Dr. Hilton Fagge and Dr. Goodhart.
Cutaneous Diseases—Dr. F. Taylor.
Anatomy (Descriptive and Surgical)—Mr. Howse and Mr. Davies-Colley.
Practical Anatomy—Mr. Clement Lucas, Mr. Golding-Bird, and Mr. Jacobson.
Physiology and General Anatomy—Dr. Pavy and Dr. Pye-Smith.
Practical Physiology—Dr. Pye-Smith.
Chemistry—Dr. Debus and Dr. *Stevenson.*
Experimental Philosophy—Mr. A. W. Reinold.
Practical Pharmacy—Instruction will be given in the Hospital Dispensary.

Clinical Lectures in Medicine, Surgery, and Midwifery, weekly.

Special Classes are held in the Hospital for Students preparing for the Examinations of the University of London and of the College of Surgeons.

The Museum of Anatomy, Pathology, and Comparative Anatomy (Curator, Dr. Fagge), contains 11,000 Specimens, 4,500 Drawings and Diagrams, an unique collection of Anatomical Models, and a series of 600 Models of Skin Diseases.

Appointments.—The House-Surgeons and House-Physicians, the Obstetric Residents, Clinical Assistants and Dressers, are selected from the Students, according to merit and without payment. There are also a large number of Junior Appointments, every part of the Hospital practice being systematically employed for instruction.

Prizes.—Two Entrance Scholarships, of £60 and £30, for proficiency in Classics, Mathematics, Modern Languages, Botany, Physics, and Chemistry. Six Scholarships, varying in value from £10 to £50 each, for general proficiency in Medical Study. The Treasurer's Gold Medal in Medicine; the Treasurer's Gold Medal in Surgery; the Gurney Hoare Prize of £25, for Clinical Study; the Sands Cox Scholarship of £15 per annum for three years, for Physiology and Physics; the Michael Harris Prize of £10, for Anatomy.

Fees.—First year, £40; second year, £40; third year, £30; or £105 in one sum on entrance, or in two moieties, at the commencement of the first Winter and of the following Summer Session.

Several of the Lecturers have vacancies for Resident Private Pupils.

For further information, apply to the Dean, Dr. F. Taylor, or the Medical Secretary, Mr. Stocker.

Guy's Hospital, July, 1876.

SOME NEW MEDICAL WORKS BY CELEBRATED FRENCH AND GERMAN AUTHORS. WILLIAMS & NORGATE.

Benedikt (Dr. M.)—Nervenpathologie und Electrotherapie, Vols. I, II. Gehirn. Roy. 8vo. with Wood Cuts. Leipsic. 1874-6.

Christian (Dr. J.)—*Etude sur la Mélancholie, des troubles, et de la Sensibilité* chez les Mélancholiques. 8vo. Paris, 1876. Price 3/6.

Cyon (E.)—Methodik der Physiologie. Experimente und Vivisectionen Roy. 8vo., with Atlas of Plates. Giessen, 1876. Price 36/-

Flechsig (Dr. P.) Die Leitungsbahnen im Gehirn und Rückenmark des Menschen. Roy. 8vo., 20 Plates, some coloured. 1876. Price 17/-

Orth (Dr. Job.)—Compendium der Patholog-Anat Diagnostik nebst. Anleitung zur Ausführung von Obductionen. Berlin, 1876. Price 10/-

(Dr. Voisin).—Leçons Cliniques sur les Maladies Mentales Roy. 8vo. Paris, 1876. Price 5/- Photographs and Plates some coloured

Schiedlen (Dr.) Physiolog-Methodik. Handbuch der prakt. Physiologie. Part I. Engravings. Braunsch, 1876. Price 6/-

Marey (M.)—Physiolrgie Experimentale. Faraux du Labaratoire de M. Marey. Roy. 8vo. 160 Figures. Paris, 1876, Price 12/6.

SAVORY & MOORE'S

PHOSPHORUS PREPARATIONS.

PHOSPHORISED COD-LIVER OIL. First manufactured in this Country by Savory & Moore, and generally recognized by the Profession as the "Original Preparation." This Oil is now extensively used, and is admitted to be an important therapeutic remedy. The advantage of this preparation (which has been much imitated, though with questionable success) consists in, the ability to administer a *sufficient* dose of Phosphorus without the admixture of a *large* quantity of Cod Liver Oil *Vide* case of Phthisis treated by this Oil. *The Lancet*, April 24, 1875.

PHOSPHORISED COD LIVER OIL with QUININE.

COMPOUND PHOSPHORISED COD LIVER OIL, containing besides Phosphorus, Iodine and Bromine

SUPPLIED IN BULK OR SMALL BOTTLES.

PHOSPHORISED LINIMENT. A Continental preparation used with success in the treatment of Rheumatism, &c.

PHOSPHORUS PILLS of any size and strength, non-resinous, and perfectly soluble; the most reliable and agreeable method of administrating this remedy.

As much of the uncertainty of operation experienced in the internal administration of Phosphorus is to be traced to the use of Oxodised or Allotropic Phosphorus, Messrs. SAVORY & MOORE beg to state that the foregoing Preparations contain only the *purest* description of this article, which is more certain in its action, and therefore more satisfactory to prescribe.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

JOHN B. MEDLAND,

MICROSCOPE & SCIENTIFIC INSTRUMENT MAKER.

MEDLAND'S STUDENTS' MICROSCOPE, COMPLETE £3.

An excellent Working Instrument.

EVERY DESCRIPTION OF APPARATUS FOR MICROSCOPICAL PURPOSES, MOUNTING FLUIDS, GLASS SLIPS CELLS, THIN GLASS COVERS, &c., &c.

CLINICAL THERMOMETERS from 7/6. URINOMETERS from 3/6.

Photographs of Guy's Hospital, Portraits of Guy's Medical Staff, Eminent Medical Men, &c., &c.

10a, BOROUGH, LONDON BRIDGE

(CLOSE TO THE RAILWAY ARCH).

BOOKS FOR MEDICAL STUDENTS

AT 3d. IN THE 1s. DISCOUNT.

A large assortment of Second-hand Books in Stock, Note Books, Dissecting Cases.

HENRY KIMPTON,

82, HIGH HOLBORN, LONDON, W.C.

OSTEOLOGY FOR STUDENTS.

The Cheapest House in London is HENRY KIMPTON'S, 82 High Holborn.

Ulna and Radius, 1/- each; Femur, 1/6, and other prices in proportion.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society, by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

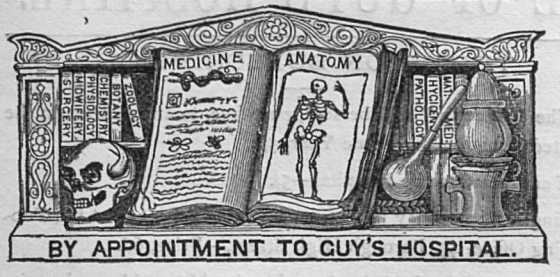
A Students' Journal of Hospital News, Medicine and Surgery.

NEW SERIES.—No. 10. OCTOBER, 1876. SIXPENCE.

CONTENTS.

Nothing	111	Mental Diseases...	118
Notes of the Month	114	Treatment of Acute Rheumatism	119
Address to First-Year's Men	116	Gynœcology	121
Leading Articles	117	Foreign Journal...	122

3d. IN THE 1s. OFF MEDICAL BOOKS.



BY APPOINTMENT TO GUY'S HOSPITAL.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE.

Books Bought or taken in Exchange. A number of cheap Anatomical Plates for Sale.

SESSION 1876 & 1877.

*** *Gentlemen Students of Guy's are respectfully requested before purchasing at any other House to send or call for "Grattan's New List."*

Druitt's Surgeon's Vade-Mecum	(12/6)	9/6
Garrod's Materia Medica and Therapeutics	(12/6)	9/6
Gray's Anatomy, Descriptive and Surgical	(28/-)	21/-
Heath's Practical Anatomy and Dissector...	(12/6)	9/6
Hooper's Physician's Vade Mecum	(12/6)	9/6
Huxley's Classification of Animals	(6/-)	4/6
Kirke's Handbook of Physiology	(12/6)	9/6
Roscoe's Elementary Chemistry	(4/6)	3/6
Wagstaffe's Guide to Human Osteology ...	(10/6)	8/-
Ward's Human Osteology	(7/-)	5/3

&c., &c., &c.

Students Note and Case Books in great variety.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

DISSECTING CASES AS USED AT GUY'S HOSPITAL.

Dressers Pocket Cases and Cases of Catheters

LARGE ASSORTMENT OF STETHOSCOPES AND CLINICAL THERMOMETERS.

INSTRUMENTS OF VARIOUS KINDS, AND APPLIANCES, SPLINTS, &c., &c., suitable for Gentlemen commencing Practice, also for Hospitals, Infirmaries, &c.

OPPOSITE BACK ENTRANCE OF GUY'S HOSPITAL.

Medical and Surgical Practice in London.

HOURS OF ATTENDANCE OF STAFF.

HOSPITAL.	MEDICAL. Daily.	SURGICAL. Daily.	OBSTET.	OPHTHAL.	DENTAL.
Charing Cross ...	1 p.m.	1 p.m.	Tu. F. 1.30	...	M.W.F., 9
Guy's	1.30 p.m.	1.30 p.m.	M. W. F. 1.30.	M.Th. 1.30 Tu. F., 12.	Tu. Th. F. 12
King's College ...	2 p.m.	1.30 p.m.	M. W. F., 1 p.m.	M.Th.,S. 1	Tu. F., 10
London	1.30 and 2 p.m.	1.30 and 2 p.m.	...	W. S., 9	Tu., 9
Middlesex	1.30 p.m.	1 p.m.	M.W., 1.30	Tu.F.,8.30	Daily, 9
St. Bartholomew's	1.30 p.m.	1.30 p.m.	M. Th., 2 W. S., 9.	Tu.Th. S., 1.30.	Fr., 9
St. George's... ...	1 p.m.	1 p.m.	Th., 2.	W. S., 2	Tu.S.,9.30 Th., 1.30
St. Mary's	1.15 p.m.	1.15 p.m.	Fu.F.,9.30	M.Th. 1.30	W. S., 9.30
St. Thomas's ...	8.45 a.m.	8 a.m.	W.F. 12.30	Daily, 2, ex. S.	Tu. F., 10
University College	1.15 and 2.30 p.m.	1.30 and 2 p.m.	Daily, 1.30 ex. W. & S.	M. W.F., 2	W., 10.30
Westminster ...	1.30 p.m.	1.30 p.m.	Tu. F.,3.	M. Th., 3	W. S., 9.15

TERMS OF SUBSCRIPTION.

The "Gazette" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to MONTAGU LUBBOCK, Esq., Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

NOTHING:

BEING A PROTEST AGAINST BUTTERMILK.

Before you can fully understand anything you must understand Nothing. Now I fear there are few of you who quite understand Nothing, so I shall proceed to shew Nothing in its true nature, to any who are wise enough to be willing to learn so much. I venture into this high dogmatic tone confident that there is modesty enough in the substance of my teaching to atone for any boldness in the manner of it.

I shall be quite content if they write, in due time, over my ashes, upon a monument as handsome as may be pleasing to them, HE UNDERSTOOD NOTHING; but in order to set forth as soon as possible my pretensions to such a tribute I will now at once address myself to my theme. Well! to begin, my first proposition, which I fear will not seem very full of meaning to any shallow reader who may chance to be wasting his time in trying to follow me, is this—*There is no Nothing, everything is Something*. Now, don't be in a hurry, and say "Nonsense! the lowest meanest truism!" as if you had sufficiently considered this simple truth, or "truism" if you like, and learned it in your eggshell or took it in with your pap, and so on. The fact is you or I may fall short as to the fruits of very primitive truths because we learnt those truths in such a baby-stage of our existence that you or I, ever after, know them only and understand them only as a child. But now we are men, that is supposing we are, let us see if the knowledge we have of this primitive truth may not pass from child-knowledge to man-knowledge. And before differing again, remember please, that those often are quickest in differing from one who have least power of apprehending one's meaning.

What I want to do is to trace out to some of its results the natural disposition of man to give a positive form to negations and treat Nothings as real things. You come on from your childhood, in which time you belong rather to Nature than human nature, and pass with your childish notions of Nothing into a man; and still childishly and naturally thinking "Here are things and there is Nothing" you enter into the preternatural human factitious world commercial, fashionable, religious and philosophical in which, although you are perhaps a bit bewildered, yet you have to find out as best you can that reality in Nature is one thing and reality in human nature is quite another thing. So that whilst Nature always contains *things everywhere*, various things, one here another there, human nature sets up negations or *Nothings* into positive form and works with Nothings as if they were things.

For Nature has none of the negations which form the negatives in the human mind. Once somebody said "Nature abhors a vacuum," but Nature is simply indifferent to a vacuum. The only thing that is not indifferent to a vacuum is the thing that invented it; that is the human mind. Human nature abhors a vacuum; it reminds us of hunger we could not satisfy, &c. If by a vacuum you mean a space containing Nothing, don't impute such an affair to nature, no one ever met any such an affair in Nature. Empty any vessel, say a glass receiver, take out all you can from it, suck out the air from it, and it is still as full as ever; it is only now filled with thinner stuff. In the most perfect vacuum ever made, Mr. Crookes will push his Radiometer round with the substance your vacuum is full of, stiffening that substance into light-rays, or as others say, into heat-rays; rays, at any rate, substantial enough to set the radiometer in motion. The luminiferous ether still is there and the material whose vibrations cause heat. At any moment of your life when your senses are active they will reveal to you a world of solid and fluid things whose places depend on circumstances. You push a moveable solid thing through the air and it "moves on" as you say; that is, afterwards the solid is where the fluid air was before and the fluid air is where the solid was before; solid and fluid things have simply changed places under the impulse you gave. As a child you think only of the solid and forget the air. Air, indeed, is the child's Nothing, he does not recognize it when it is still, when it rushes by he calls it wind, when he draws it into his chest he calls it breath. But we must get completely rid of the ignorant idea that in Nature there are "Things" here and "Nothing" there. In Nature all parts of the World are equally full, whether they appear to you to contain solid or liquid or air, which is the child's "Nothing." The air is as real and as full as the solids if less dense. The smallest point of it might be magnified to infinite extent and you would never attenuate away its reality or see Nothing in the chinks between its atoms; that is so long as you kept from introducing your own ideas into the observation—a superhumanly difficult performance, by the way. There is no Nothing in Nature, unoccupied space or "Nothing" is a dream of human nature.

Nothing is a peculiarly human production, human nature invented Nothing. Human nature may be said to have arisen when men learnt to set up negations into positive forms, and man lives in a vain show and disquiets himself in vain because he set up negations into positive forms and made desires take articulate shape; desires being the sense of want or negation; and desire-articulate was a positive form given to the negation or sense of want of the thing wanted when man uttered that negation. He wanted sweet and the articulate desire was an utterance of "not sweet;" and thus he set up an opposition, sweet, *not sweet*—white, *not white*—good, *not good*—life, not life, and so on. A peculiarly human opposition; the positive on one side and the negative of that positive on the other side and some of these negations being wants of things which human nature thought very desirable it even gave quite distinctive names to these negations, such as "bad" to not good, and "death" to not life.

But Nature has no such opposites as these. In Nature varieties of reality exist; no opposites like white, not white exist in Nature. In Nature the varieties of reality may so come under our observation that we see what we think opposite things;—say a white swan and a black swan. But what I want you to attend to is that whilst Nature shews you a white swan she never shows you a swan that is not white, she shows you a grey cygnet or a black swan with a red nose at the root of its bill; *something that positively is what it is, that is what Nature shews you.* You may choose to say the black swan with a red nose is a swan that is not white if you like, in your foolish human-nature way, but Nature has nothing to do with the not-whiteness of the swan, she has a positive blackness and red-nosedness in her swan and cares not the least as to your "idea" of not whiteness any more than that her swan is not green cheese if you choose to think that. The *opposites* in our minds are *Thing and Not-thing* but the opposites in Nature are *One thing and Another thing.* In other words Nature offers alternatives and never opposites.

But my very thoughtful reader may say "Oh! this is dreadful rubbish, why this Professor of Nothing would tell us that Nature is indifferent to not-whiteness and to negatives generally—say to not-greasiness. Now the other day I had three poles in water, two greasy ones and one not greasy, and the two greasy ones were not wet but the one not greasy was wet, was wet because it was not greasy. How then do you mean to say that the real pole was indifferent to not-greasiness? We have no patience with such stuff. We don't want your candle to help us find the daylight."

Ah! poor fellow, I reply, he is so taken up with things he cannot understand Nothing. With his bright daylight he would never believe in stars. Perhaps it needs the creeping dusk of later years in us old fellows to make one sensitive to other light and to know the nature of light and darkness. He is a mere child. You see, child! it is only your ignorant animal way of seeing your own peculiarities in other things that makes you talk of such absurdity as not-greasiness wetting a pole, of course it was the water that wetted the pole. And

there is in the pole no such thing as a not-greasiness, any more than a not-green-cheesiness. Be patient, and I will show you how you are obliged to think the way you do. It is all your human nature which you cannot help attributing to Nature. Thus, knowing by experience the use of greasiness against wet, your human nature, which differs from Nature in its capacity for anticipation and desire, has a desire of greasiness on the pole, which desire is a want of and therefore a sense of the absence of greasiness; and in the form of desire this negative want takes a positiveness in your human nature, your human nature positively feels the negative want and you have worked with such negatives in positive form until you actually find yourself uttering such preposterous absurdity as not-greasiness wetting a pole. True such positive negations give to human nature new powers beyond Nature. Powers of anticipation and will which in time have made man an agent capable of vastly altering the face of Nature on parts of one planet. For by these powers man formulates anew the conditions of Nature, something in the same way that algebra formulates anew the conditions of arithmetic. So that human nature in a certain way stands to Nature as algebra to arithmetic.

But when your human nature attributes these negational formulæ to Nature which is not human nature then your human nature makes big mistakes in the not unimportant matter of the relation of your human nature to the Universe, which is the subject of Philosophy. It is a peculiarly human nature view of cause which sets effects down to negative conditions. It is because we are distinguished from Nature to feel and formulate desires, and thus to fulfil her otherwise unperceived and unfulfilled possibilities, that we recognize negatives and by (human) nature treat them as of positive efficiency, and mixed up as we are with Nature we impute our negatives to Nature herself, whereof we are but a kind of bad reflection. *Instar Speculi inequalis ad radios rerum.* Bad that is, unless we are turned out very carefully, and always cheap because we are so easily replaced, and our human nature reality is a reality like that of the World "through the looking glass."

How much high philosophical discussion might have been saved if these simple facts about Nothing had been recognized. Making clear the separation of logical subtlety from enquiry into Nature. The positive and real in Nature receiving its true valuation and the negatives seen to be mere human devices. Even very great and illustrious philosophers have been so apt to go mixing up positive and negative and treating them as if they were equally real. Take for example the method of Socrates, say the discussion at the commencement of the "Republic" of Plato where he lays all his questions as between alternatives equally positive in form, but one of which is a negative, justice—injustice, and so on. If you see this you find it is the source of nearly all the difficulty he raises. The truth being that "justice" signifies and is a positive state of things. It means the accommodation of existing facts to actual laws or else to your actual sense of right. A positive state of real affairs. But injustice is a negative and cannot be recognized and aimed at in a positive way in real Nature. A man may follow justice according to his notion of it, but a man cannot form a notion of injustice and follow it. He can aim at a mark but he cannot aim at no mark. To give what is undue is not a possible aim, in any issue a man never aims to be unjust, he may be unjust and often is so, but this is not because he sets before him injustice as an aim in the same way that Judges make justice their aim. It is rather because some other aim of a positive sort, as positive as justice, but at the time in that man more powerful than justice, such as revenge, love, covetousness, &c., is diverting him from observing to keep the due balance of justice. And it is this want of perception of the chasm between Nature reality and human nature reality in Plato which partially justifies Bentham's severe remark:—"While Xenophon was writing his History, and Euclid teaching Geometry, Socrates and Plato were talking nonsense under pretence of teaching wisdom," although that remark revolts Mr. Matthew Arnold very decidedly. But this confounding of Nature and human nature after all relegates the reading of Plato to the level of an enjoyment, much prized by "Culture," since it affords that luxurious phantom the pale delight of raising and welcoming the ghosts of many good old jokes and fine fancies of the mighty dead (none the mightier for being dead, save amongst phantoms,) and the further delight of justifiably enjoying its sense of a very gentlemanly skill in the feat.

But although there are still those who would form themselves and mould those they influence by a reverential study of systems of "Philosophy" in which Nature reality and human nature reality are confused together. Yet the tendency of the young minds of the present time is in quite a different direction. In one way we may say that the realities of Nature and of human nature are now widely distinguished from each other, certainly in a way they were not distinguished in ancient systems of Philosophy, but in another very important way there is now more than ever a great and subtle danger of forgetting Nature in human nature and that, strange to say, in the pursuit of the study of "Physical Science." It is this danger I am all the while driving at (aiming to bring "Nothing" up against it, if you will). This is how, I think, the danger arises:—the results of experimental observations now on record are immense, the material laws, or "forms," as Bacon termed them, to be learnt by a young man are numerous; so that a very large part of his time and attention is necessarily devoted to these "laws of Nature" before he can satisfy the demands his seniors put upon him. But these "natural laws," although obtained by their original discoverers through the most careful study of Nature on the experimental method *are not Nature.* They cannot fulfil the place of Nature towards the student. And he who fills his mind merely with them is not therefore a student of Nature; neither, as a man, does his mind by their means *thrive all round.* Why see! the greatest physical laws discerned by experiment are only applicable to ideal conditions. Take for instance the beautiful laws of Boyle, Dalton, Gay Lussac, and Graham upon the variation of the bulk of gases under pressure and temperature, and you find Dr. Andrews, this year, quoting with approval, in his admirable address to the British Association, the saying that these laws only apply to ideal gases and that when gases approach conditions of liquidity the laws no longer govern them. And if this is true of such magnificent generalizations as Dalton's laws, how about such "laws" as those of Nerve-physiology and Nerve-pathology, when the College of Physicians lets someone come and drive about in the usually recognized generalizations until all that you have ever learned appears to be mere matter of obstruction in the way to Dr. Brown Sequard's new chaos. The College might have been more kind to its "science," and dealt gently with it, like Nature does. Nature who, in her quiet way, has a sort of mortmain law, so that she rots bad generalizations out of the memory of man. Unfortunately though good ones accompany the bad sometimes.

Recognize, therefore, that the generalizations of physical science are not sufficient to make a man of you. The greatest, grandest of them are, with exceeding few exceptions, grounded on negations with which, as I was just now urging, nature has nothing to do. Nature is manifold and infinite and has no Nothing, and is never quite true to generalizations which include negation in their basis (and perhaps only Newton's laws of gravitation and light are quite free from negation). Therefore, few of the grandest generalizations can be quite trusted to in the real problems of nature. The alternative power of Nature laughs to scorn your human-nature negation, and gives your mighty generalization the slip; slips out of the hole in the grounds of your law (a negation is always a hole which nature's realities slip through). Therefore, you who have yourself to share in Nature's real and positive work as a man and a Doctor, be much with nature herself; mix in

the things that are going on in your future line of life, and let all your faculties have full and fair play that you may be educated in all your powers. Your examiners will, I think unhappily, compel you to have a full cram of generalizations, "laws of nature." It is the pride of our age that there are many very trustworthy and sound generalizations which worthy predecessors can hand on to successors. But, alas! there is a vast heap of trivial petty and fragmentary and doubtful generalizations which you will be made to learn in your great big books. Study well your books, but things teach more of you. Books tutor your reason; things tutor also at least your imagination, and if you are observant will store in you a fund for all your faculties from fancy up to faith. Students must be fed on very concentrated intellectual food in their books, but the amount of it should bear some proportion to their time and powers. Soon they will be like so many maggots born so very deep in such very big nuts, that the poor things never or rarely succeed in eating their way out to wings and daylight; perishing thus miserably short of a higher life, because the supplies of their larval stage were too voluminous. Such abortive book-worms the Colleges are trying to make you all. Help yourselves, or God help you! Read with judgment, and use your senses well. Your books have no right to do more than suggest guide and aid towards your work in the real world you are to become meanwhile a part of. The man who only crams his "mind" with the trivial generalizations that swell up your volumes too big, gets a peculiar look of the species of dissipation that is quite characteristic. Blankish, awanting, abstracted, and with a certain unreadiness on the present occasion, whenever that may be—whether even the animal young man from the turnip fields who hangs about our fives court is wider alive than he.

The combination of sensations (John Hunter's expression for the origin of mind) which this world produces on your senses, is the *raw material of your own particular mental life.* And your mental machinery has to work it into a fabric more or less beautiful or otherwise. And this *raw material* is as much the property of the most uneducated as of the most highly educated, if only observation is equally careful and affectionate. All good observation is done with affection. The greatest philosopher only works upon his own collection of raw material (this is much more true than you may allow). Your Teachers cannot teach you, they can only help your senses to teach you. I have a thousand times wasted my efforts telling people what they could not know, because their experience had not given them raw material for it. Well, now! look at the present state of affairs as they stand before a student: The "laws of nature" of all sorts he is asked to learn are insufferably numerous; insufferably especially because they are mostly so trivial and crude. Little bits of science are now made so much more of than they are worth. It is the age of such a cheap press, that everybody publishes his little new fact or notion. No one keeps to himself his little ideas until they are either established, or, as more likely, dissipated. If he gets a notion, off it goes to the public press as to a stock exchange, where he tries to discount it for credit before next week shall explode it. The cheap press makes them all write. Just as cheap railway trains are always taking people about on little silly journeys where, in a properly stationary world, they wouldn't want to go—this only uses up coal. But the miserable hasty generalizations that crowd into our cheap literature spoil human brains; now that the young man is made to know elaborately these wretched generalizations in an elaborateness altogether beyond their value.

It is not as true as that "*The King himself is served by the field*" that science is dependent on the devotion of its votaries to Nature herself, and that the young votary must be allowed to reach Nature herself before all his ardour is expended, and before all his brains are worn out in conning the scraps that everybody has prematurely printed. Therefore, I protest, as all my life I have protested, against occupying the best part of a young man's life with the elaborated details of everybody's results, embodied in half-digested trivial generalizations. The Orators of our Annual Medical Eisteddfods (there is a sort of out-of-the-world Welshness about Physic somehow) tune their eloquent harps to make little things sound big. It takes, too, more time and attention to learn a little thing than a great one; and it is more than half a sin to embarrass with trivialities a real young man's real life, as his seniors do when they oblige him to worry over half-digested hastily-published "observations." These wise foster-parents who stuff you with their thin buttermilk when you want meat.

The cheap press pours out the crude details contributed by little people; and other people no greater, except as more voluminous, sweep up the details into books of ever increasing size, from the last edition of your once portable classbook, through so and so's system of large books on medicine up to Ziemssen's regiment of tomes. Heaven help you! Can a cheap press multiply your precious moments? Is Ziemssen to take the place of the Nature you are, after all, a part of, and which solicits your attention and your labour? Out upon it! Will nobody condense these gallons of wretched buttermilk. Thank God for the help Nature will bring you—dear, quiet, mother Nature! The true loving mother she will protect you young ones. In her silent way she has a Mortmain law. The dead becomes at last powerless. Corruption will overtake the buttermilk. *Dies iræ* but *Lux Æterna.* There is a good time coming.

I am not at all excited. It is time to be earnest and earnest I am. At Guy's we try to teach and encourage you to learn things rather than words. The recent results of examination may shew that on Buttermilk standards, our products are not sufficiently bulky and thin to be rated at the very top. Unfortunately, I think, all our Examining Boards are conspiring to make the test of rising excellence turn upon a cram of ever more microscopic trivialities; and the London University, still more unfortunately, even goes so far as to carry on its examinations on a system which ensures its much coveted prizes to those men who are crammed with the particular examiner's own peculiar trivialities. If you doubt this, look at the results! See what schools get the prizes and observe at what schools the examiners teach. The examiners cannot help it, they believe their own trivialities, they cannot even know those of every one else. Let all who are responsible for legislation in this matter observe the signs of the times. Science is not very well. Dr. Andrews in his address to the British Association speaks of the alarm that has arisen in England and elsewhere at the decline of science, and then eulogizes "Poggendorff's Annalen." But I believe science is over be-Poggendorffed. That annals of all sorts cast scraps into the intellectual atmosphere, until it bids fair that science will be smothered in the dust of her workshop; even in the cleaner halls thereof, where her purer pursuits are followed; much more in the Medical Department, where her job is so dusty that you would hardly know Science when you meet her there. No wonder she shows symptoms of decline. Somebody lay the dust. Not so many scraps about. That the Boards do settle for us what things do constitute real knowledge. That examiners leave off encouraging trivialities, and sensible men get credit for their judgment and power. Look at the discussion between our teachers on the most important subjects of our study, such as Tubercle, Pyæmia, &c., and then consider how is a student brought up under Professor A to stand examination by Professor B; and in honours, tell me whose pupil will stand first.

I wish I could help you. You can do a good deal to help yourself. Learn with a discrimination of the true significancy of things taught, and judge of them by obtaining experience of your own as soon as ever you can and as constantly as you can. Make good use of your senses. *It is your senses that keep you sane.* Not the kind of sense which you speak of when you say, "Johnson is a sensible young man" but your "five senses" that shew you the real world of this present moment. Those five senses which, when sleep closes them, leave you

such a foolish trifler as you are in your dreams—(excuse me)—which foolish trifler you surely tend to become if you don't make due use of those senses when you are wide awake—(are we ever *quite* wide awake?) Your animal senses will keep you sanely belonging to Nature if you give them fair play. Her strong impressions upon them will start up in your mind, and raise analogies amongst the things you have well seen and heard; and thus you will become endowed with a healthy imagination, a spontaneous uncoerced natural supply of images and records within your power at any time, and these will start up in your course of thought as real instances, whose consonance will increase the vividness and richness of your ideas. As when the vibrations of sound enlist in their movements the little stones within your ear, and so exceed themselves in their influence upon your hearing. For just in the same way thought is increased by the things in the mind which it is able to throw again into vibration. Hence the value of Metaphor. No thought is ever strong and true which does not thus arouse something into unexpected harmony.

But to be well experienced by keen observation of natural things will help you to anticipate practically the course of things you yourself are concerned in. And this by a kind of instinct requiring little voluntary effort. Because the works of Nature are done on such similar methods in all her fields of operation that what happens in one is full of analogies with what happens in another. So that almost unconsciously and by habit your senses adapt themselves to, and can anticipate the successions in things, and prompt you quickly in thought and action. Even the "Lower Animals" who have *no science acquire an insight into so much of Nature as* concerns them; an insight which would often shame the capacity for folly which some learned Savants show in matters wherein their own interests are deeply concerned.

In short, the earnest and affectionate observation of Nature endows you with *Imagination* and *Intelligence*, and these two are of infinite value *to you*. They are, for home consumption, the best part of you, whoever you are. The best part, I mean, of your own individual self which your mother loved, and which those who divide it into mind and body don't love a bit. Imagination and Intelligence keep mind and body together and keep them keeping each other bright. For dealing with real duty in the real world we don't want all our intelligence to be fine drawn into intellect. It does not do to draw out the whole mind into set lines of pure reason, even though those lines be planned on the soundest of experimental methods. Your Intelligence should be greater than your reason or you are a lost man. If you don't keep Intelligence enough to use, and, on due occasion, to smile at your reason's finest products, there will be other people who will do both for you, unless you are most obscure and forgotten. Read the Times just now and see whether his trained reason brought up to the high finish of our modern experimental intellect can save your F.R.S. when his senses are weak and deluded. The Spiritualizing F.R.S.s., I mean, who have acquired such confidence in the experimental method, as practised in Physiology, that they are ready to hold a "Séance" with a conjurer, and to draw conclusions from matter to spirit on the strength of his tricks. More Intelligence in proportion to trained reasoning would save us an omen so humiliating to any who had hoped that a great future lay before Humanity through scientific acquirement. But the truth is mere training in science will not make a man of you. Science belongs to your Race, Intelligence gives you a self. A Savant may hold a good place in the Race, and yet be a fool, because he has not kept enough Intelligence to give him a sound sensible self. Follow science for your place in and your duty to the Race; but remember, O good Student (I am not writing for idlers or triflers, the persons who hang about the Fives Court when they are not playing and the colonnade when they are not working), that the better the self your intelligence developes in you, the greater will be your value as an individual amongst other individuals in any group at any time. Your learning, all your teachers ever taught you, gives you a unitship in such and such a place in your Race. But you will yourself have to make it rich and good by what your own five senses can store from Nature as a fund for your Intelligence to use in the current life you belong to.

I am not now extolling that forward progress of the Human Race in the knowledge of Nature, of which progress the said Race is so proud. I am not speaking for the Race, the race is strong enough to take care of itself. I am a Physician and therefore I have charge of the good of Units as against the Race, which is always trying to displace them in favour of new Units its profusion has produced. Such opposition to the Race is the function of the Physician. Therefore it is that he is not and never will be in great consideration in the Race. So that from all the higher "honours" which the Race can bestow on its warriors and lawyers he is shut out, having a baronetcy handed to him now and then. To accept which is, from my point of view—a view founded on Nothing, as you have seen, I admit—to accept which, I say, is, from my point of view, derogatory to the highest sense of a Physician's true function and kind of honour. (The Race has never offered me a Baronetcy).

However, don't let me be distracted by the contemplation of worldly grandeur from my true text, which is that the voice of Nature says always "I am that I *am*," whilst every man is not only what he is but also very much what he was, together with a sort of sense of something acoming like that which keeps you watching a bad play. Both which relations of past and future reflected upon that present, which he shares *with Nature as far as he is what he is, introduce the Nothing* into human perception and expression. And thus it is that a certain vanity foreign to Nature characterizes the human nature world, commercial, fashionable, religious, and philosophical.

PILOCEREUS SENILIS.

NOTES OF THE MONTH.

UNIVERSITY OF LONDON, FIRST M.B. EXAMINATION FOR HONOURS, 1876.

The following Guy's Men obtained honours:—

J. C. UHTHOFF.—Gold Medal in Materia Medica and Organic Chemistry. Second Class in Physiology and Comparative Anatomy.

F. H. BERRY.—Second Class in Materia Medica and Chemistry.

G. MACKERN.—Third Class in Physiology and Comparative Anatomy.

The following questions were set in Physiology and Comparative Anatomy.

1.—Give a historical and critical account of the "Cell Theory."

2.—Describe the development of the Spinal Cord, Brain, Eye, Ear, Face, Nose, and Mouth.

3.—Give an account of any peculiarities known to you in the Lymphatic system of the Frog.

1.—Give an account of all the facts in Nerve Physiology capable of demonstration with the aid of suitable apparatus, together with the Sciatic nerve of the Frog, severed from the Spinal Cord and detached in some cases but attached in others to the muscles of the leg. Describe briefly the various experiments necessary for the demonstrations, and suppose yourself permitted to use any desirable number of nerves in a fresh condition.

2.—Give the leading points of difference and of agreement between the Marsupialia and Monotremata.

There are now no less than ten subjects in good condition ready for the dissecting room. A somewhat novel method has been adopted to keep them from the influence of the air and "those dreadful germs." Each one has been wrapped up in a large sheet of macintosh, the edges of this cemented together so as to form a large air-tight bag, which also contains a strong solution of Carbolic acid.

We would remind junior students of the following voluntary examinations for prizes:—

1.—Entrance Examination, for students of not more than six months standing at the Hospital. Two scholarships of £60 and £30.

* The subjects for the Entrance Examination in 1876-77 are the following:
Greek:—*Homer*, Iliad, Book III; *Xenophon*, Memorabilia, Books I., II.
Latin:—*Virgil*, Ænid, Book I; *Cæsar*, De Bello Gallico, Books I., II.
German:—*Goethe*, Hermann and Dorothea.
French:—*Moliere*, Le Misanthrope.
The examination will take place on Monday, October 9th, and the three following days.

Mathematics.....	Aritmetic Algebra, to Quadratic Equations. *Euclid*, Books I., II., III., IV. Plane Trigonometry.
Chemistry.	
Physics.	
Botany.	

Candidates are allowed to substitute for Greek the two modern languages, French and German.

2.—MICHAEL HARRIS PRIZE, of the value of £10.

Subject:—Human Anatomy, including minute Anatomy.

The Examination will take place at the end of the Winter Session, and will be open to the same Candidates as the preceding.

Mr. A. GARDINER BROWN; F.R.C.S.Ed.; of St. Thomas' Street, (an old Guy's man) has been appointed Aural Surgeon to the London Hospital and Lecturer on Aural Surgery to the Medical School of that Hospital.

Mr. Brown was unanimously elected out of seven candidates.

Among the new books promised shortly is a new (the second) edition of Mr. Hilton's "Rest and Pain" by Mr. Jacobson. The few ragged copies that remain of this excellent work testify how hard it has been read. At a large sister Hospital it was necessary to put one's name down a month or two beforehand to get a chance of reading it.

A Conversazione will be given by the President and Treasurer of the Hospital on Monday evening, October 2nd, at 9 o'clock. The museums will all be lit up, and Astley Cooper ward will be specially fitted up with interesting preparations and models, &c.; so that an instructive as well as plesant evening may be looked forward to.

The Terra del Fuego has been traversed by Lieut. Masters, R.N., who has discovered that the natives believe in devils, and hold them to be the departed spirits of members of the Medical profession. The main object of their religious ceremonies is to keep these devils at a distance from them.

Jeremy Taylor's Father.—In Cambridge, in the August of 1613, there lived a barber named Taylor. The barber of that day differed widely from his modern representative. He not only shaved, but dressed wounds, drew teeth, and practised bleeding, was, in short, both barber and surgeon. Before the Reformation the clergy had stigmatized his calling as so brutal and degrading that they refused him their benediction, in obedience to the edict of Pope Honorious III. But it was becoming far more respectable in the year we have mentioned. In ancient days, when the priests, who afterwards anathematised play-actors, were dramatic authors, players, and managers, they also monopolised the arts of healing. But after the Pope had prohibited them from undertaking all operations which involved the shedding of blood, the functions of which they had before been proud and boastful were given over to uneducated hirelings acting under their instructions, the barbers who had tonsurated their clerical skulls. And when these skilful barbers became an independent fraternity as surgeons, the priests, affecting to abhor their doings, denounced them as cruel, sanguinary, and brutalising, and pronounced surgeons and barbers as irrevocably damned, in language as strong as that now used by those who shrink in disgust from vivisection. In process of time the barber-surgeons had become divided into two classes—those who, like the barbers of the old religious houses, were ignorant and uneducated, forming one; and others, who were specially trained and educated men, constituting the other. Taylor, the barber-surgeon of Cambridge, was amongst the latter.—*Builder*.

Prescribing Chemists.—Recent judgments have shown that druggists are liable to penalties when they undertake to act as doctors, and so infringe the provisions of the Apothecaries' Act. We are probably not saying too much when we assert that nearly every druggist in the provinces is in the habit of prescribing medicines for the treatment of disease. In each small town there are usually two or three venerable members of the trade who are held in high repute by the more ignorant country folk of the distirict, and who reap a rich harvest on market-days by selling physic selected by themselves for the cure and comfort of the sick. Herniæ are examined and trusses applied, pessaries are selected for uterine displacements, and a brisk trade is done in "mixtures." The disorders of children are often held by the uneducated to be especially within the scope of the druggist. Nor have these consulting chemists been without their "misplaced charity." Not long ago the senior member of a well-known and wealthy firm of wholesale druggists in one of the largest provincial towns was wont to set apart one day in the week on which to give advice and physic gratuitously. The General Medical Council would be doing something towards earning the gratitude of the profession if it undertook the prosecution of these irregular practitioners.—*Med. Exam.*

GUY'S HOSPITAL GAZETTE, *OCTOBER*, 1876.

THERE are two points on which first year's men at Guy's may safely be congratulated—their choice of a profession and their choice of a Hospital.

The former has been no doubt the result of much deliberation, and in many it has been accompanied by an enthusiasm which we trust may continue in spite of examinations and other such necessary evils. But let those not despair who bring no enthusiasm, for the vast interest and even charm we may say of the work they have commenced will, or ought to, beget in them an enthusiasm which has all the more chance of surviving, inasmuch as it has been developed by the influence of the environment, and if, added to this, they are "born doctors," that is, if their powers have descended by inheritance, we may most surely *evolve* a brilliant future for them.

Much eloquence in many words, will, as usual, be expended in the various introductories on Monday, in shewing forth the advantages of the Medical Profession to the public in general and the first year's man in particular; we will not interfere with them, if our men intend reading them all, they will probably have their work cut out for them. On our part we will eschew burning words and try to be practical instead. With regard to the second point, the student who becomes a Guy's man can never say he had not every advantage in studying a profession by no means the easiest. A plentiful supply of subjects, preserved during the summer according to Mr. Howse's method; lots of bones in Betts' Anatomical Museum; the finest collection of wax models in London; experimental and practical lectures in Physiology. These are all riches which cannot be made too much of by men preparing for the College "Primary" in April or April year; while, that ordeal passed, there are the Surgery full, (let any one look in there on a Monday morning); out-patient benches literally groaning beneath the weight of disease waiting to be recognized and treated; the higher luxury of a certain number of beds in the Wards; the dignity of "Dresser for the week" with a bell and sofa all to himself; the Charity with his little band of retainers, the Externs; the House Surgeons and House Physicians; Who can carry a chloroform inhaler like the former? or, Who wield a stethoscope like the latter? to say nothing of Opthalmoscopy and Iridectomies in the Eye Wards. This is no ideal picture that we have drawn; every man who works honestly will, in process of time, get these appointments; and if he make at all a proper use of them, they will give him, in after life, a confidence in himself and a certainty which can be gained in no other way.

But here we would give a note of warning to those, not a few, who have been impressively told that "the bedside is the place where you must learn your profession," or who have been sent up with the parting injunction "stick to the Wards." We will commence by denying in toto that the Ward is the place for the man who has not passed his First College, and therefore for the first year's man; on the contrary, the dissecting room or physiological laboratory is *par excellence* the place for him. What would be said of the man who tried to read a book in a foreign tongue without having first learned the alphabet? Or of the man who tries to learn a language by merely familiarising himself with the sounds of the words and trying to imitate them? He might by force of memory reproduce a good many of them, but he could not be said to have an intelligent idea of the language. The observation of facts is perhaps the most valuable faculty for the Medical Student to possess, but if, at the same time, the facts themselves are not thoroughly *understood* the mere picture that their observation has formed on the brain is in danger of fading away into dim space before long. Pathology, which is what is learned in the Wards, is, to a great extent, a perverted physiology, while the basis of surgery is anatomy; hence, theoretically a good knowledge of anatomy and physiology appears to be essential for successful clinical work, and practically it has been found that men coming into the Wards with a thorough knowledge of these subjects learn their medicine and surgery more easily and take a greater interest in their work. To carry the illustration a step further, a person attacking a new language

is not always learning the alphabet, but he is always making use of the letters in it; so we take our physiology and anatomy to the bedside and find we cannot do without them there.

The atmosphere of this Hospital is far too practical for us to fear being blamed for seeming to underrate the value of clinical work; on the contrary we believe the vast stores of Guy's Hospital are not sufficiently drawn upon, and further, we believe one of the causes of this neglect to be a tendency to what may be called the "Fallacy of Specialism," which collects a set of symptoms and brands them with the name of a disease, instead of regarding such pathological lesions as a mutilation of a great and perfect physiological whole, hence the student finds it irksome and well nigh impossible to master an array of diseases which are legion. To go more into detail, it cannot be denied that many men take an appointment at out-patients or in the Medical Wards who have no idea what a natural breath murmur is like, and to whom the sounds of the heart are as a confused murmur, and we have often noticed, when going round with the registrars, what an amount of topographical anatomy and elementary physiology has to be taught before the cases can be gone into: thus valuable time is used up, and good things are learnt in the wrong place. No doubt the present system of examinations has a good deal to do with this, but the College of Surgeons is liberal enough in its allowance of eighteen months for its Primary, and this time is ample, *if used in the right way*. Much and very important time may be wasted during the two first years in dabblings in pathology, and this seems a suitable time wherein a friendly warning may be given to men "who don't know what they ought to do," or who, at any rate, ask the question.

There are many points of social interest which must necessarily be connected with a body of men numbering some three hundred or more; but we would draw special attention to our flourishing Debating Society called the "Physical Society," where papers are read and discussions carried on by students alone; here every man may learn to speak up for himself, and to test his knowledge by the knowledge of others. A Hospital Gazette containing Reports of Cases, Clinical Lectures, points of interest in connection with the Hospital, &c., &c., is published every month. We need scarcely say that every Guy's man begins by joining the one and subscribing to the other.

With regard to the moral aspect of the Medical Profession it is not for us to say much, but we may say this, that there is probably no profession like ours where steady, conscientious work is so well repaid, not so much in guineas as in a certain inward feeling of satisfaction that facts are being daily learned which may prove of incalculable value to some one who needs our help at a future time.

WHAT is the prevailing idea amongst the more thoughtful ones who, about to leave the spot which has been their daily haunt for the last few years, are going to essay to practice what has been preached to them? How painfully conscious they must be of the little they know, and how often the thought must have occurred to them that the effect of all they have learnt has been only to show how much there is to learn! Are they not conscious of how little the causation of disease is known; or, at least, the relation between cause and effect? Is there a single disease outside the pale of theory? Knowing so little of that wonderful property *life*, no wonder the various gradations from vitality to its contrary are so uncertain and obscure. We write this with no object of discouragement, but, on the contrary, to point out to those pilots of Medical Science who are leaving us now, that we have need of them still. They are going forth to almost unknown seas, they will meet with many shoals and quicksands; let them not then forget to mark them down on the chart, so that the way may be less uncertain to those who have to follow after.

WHEN, next week, the Reports of the various Introductory Lectures come into our hands we shall probably hear again the oft-repeated tale about the gloriousness of our profession, and how, if it does not bring in money, it will produce for us much of money's worth; sentiments all very good so far as sentiments go, but which are of very little use to us in

the great struggle of existence. These remarks have been suggested to us by a correspondence published in the *Lancet* of September 23rd, between the Secretary of the Medical Defence Association and the College of Surgeons, in which the latter refuse the use of their name to restrain the practice of those unscrupulous men who do not hesitate to dub themselves Surgeons, and then to prey on the ignorant, as a matter of course to their great detriment. It is a manifest injustice that the prevention of the practice of such men should be left theoretically to private individuals, who practically have neither time nor means to carry on a costly prosecution. We, who at a large expenditure of time and funds, have qualified ourselves, so far as we are able, to combat against disease, have a right to demand protection from these Bashi-Bazouks who prey upon society. It is true that these remarks do not affect what may be called the aristocracy of our profession, but its humblest members have an undoubted right to protection, although the more exalted do not need it, for no one will deny that those who practice among the poor are doing as good and useful a work as their more fortunate brethren. We will propound a riddle to our readers, but we fear it is one without solution,—Why do we pay five pounds for registration to the British Medical Council?

Mental Diseases.

BY DR. G. H. SAVAGE, OF BETHLEHEM HOSPITAL.

NOTES ON LECTURE IV.

CASES OF ACUTE MANIA.

We shall first take several cases of simple acute mania occurring in men and in women, cases in youth, middle age, and in old age; some that were cured, others that died, and some that were uncured; referring to cases that have had several similar attacks.

The first case is that of a schoolboy. He was young to have such an acute attack and to recover. We see children occasionally have maniacal attacks but they usually leave imbecility.

J. B., aged 14, Schoolboy. Maternal aunt insane, another nervous. The supposed cause was chagrin at being detected in petty thefts. For a time he was dull, as his friends said "imbecile;" he then became excited, had extravagant ideas of his importance and was mischevious and noisy. On admission he was thin and pale, he took his food well, his bowels were confined, tongue moist with slight fur. He was sleepless and noisy at night. The temperature was very little above normal. This patient rapidly became quiet and well behaved and though he was mischevious we put this down to his ordinary character and age. He was discharged well after three months residence in the hospital.

S. C., aged 20. No known tendency. Fourteen days before admission he fancied the world was coming to an end and gave up his work, he then fancied that he was predestinated by our Saviour to go on the stage. Although so young he had been guilty of sexual excess. In the hospital he was much given to masturbation. On admission he was thin and looked weak and ill, he was noisy and talkative, giving himself stage airs and spouting low tragedy. Before admission he had been to Moody & Sankey's revival meetings. He was sleepless and his appetite only moderate. The stage of excitement was rather prolonged.

I blistered his penis to prevent masturbation but no mental gain was made. At the end of three months he became quiet and then dull for a time, seeking solitude; we sent him into the garden to work and he rapidly improved and was discharged well at the end of five months.

The next two cases are those of females similar in many respects to the former.

H. B., æt. 18. Mother insane. Menstruation ceased for two months and then she became depressed, she then became an intractable patient, would lie in bed all day and neglect the calls of nature.

On admission she was a sallow, unhealthy-looking girl; noisy, violent and talkative, sleepless, taking food well. She would answer a question and then ramble off on any subject suggested by her surroundings. She tore her clothes and was amorous. She had an exalted idea of her person, and sang loudly and badly and pretended to speak French and German; this state of excitement lasted for some months, Succus Conü had no good effects but daily shower baths seemed to hasten her recovery and at the end of seven months she was discharged cured.

J. B., aged 20. Mother in Bethlehem ten years ago, recovered and kept well, paternal uncle and aunt died insane. Phthisis on mother's side.

Had one previous attack of a similar character. At first was sleepless and restless for about a fornight then became noisy and destructive. She was noisy for a short time then became dull and indolent, this lasted only a fortnight when she again became noisy and violent. During the stage of violence the urine was sp. gr. 1035, Chloride 9, Urea 35, Phosphates 9 per 1000.

There were several periods of quiet alternating with times of great violence, in these latter the face was flushed and the skin warm and moist. She was treated with Camphor and Chloral Hydrate each in 10 grain dozes but this produced sickness and collapse and was discontinued. After four months she began steadily to improve, she was less flabby in appearance and thinner. At the end of seven months she was discharged cured.

In the above no medical treatment affected much good. Quiet may be gained by large dozes of Opiates but the general health suffers and no real good is done. In the last case the inherited taint was very strong and the emotional characteristics common in such cases were well marked. When she became very excited she was put in a padded room and indulged in her excitement unrestrained. This is one of the advantages of an asylum, the patient is not worried by restraint.

A young uncured case is the next.

Henry C., 23, single, a Footman. No neurosis in family. For some months was moody and depressed. Before admission he pulled out the hair from his pubes then became excited and knocked over the furniture. On admission he was thin, pale and sickly, restless and irritable. He did foolish things suddenly directed by hallucinations, sleepless, appetite bad. No proof of masturbation, though suspected. During the year he was under treatment he never improved, he was

irritable, idle and troublesome, fancying—though badly educated—he was fit for a high station.

He was discharged uncured. It is interesting to notice that the fire at the Pantechnicon, near which he lived, was said to have greatly alarmed him.

I add a rather rare example next of death in young acute mania.

William J., single, 21, a Clerk. No insanity in the family, but a strong double tendency to consumption existed. Six months before admission became strange, went on duty with the Artillery, attempted to kill his mother, said he had written all Mozart's and Beethoven's music. He varied, and at times was very silent. He ate voraciously.

On admission he was a well built young man but sallow and ill-looking. He was very suspicious, and required four men to dress him. At times refused food from fear of poison. Masturbation toexcess. We found a strong ring of whip cord round his glans. Bowels confined.

Within three weeks of admission he was noticed to be much thinner and had less excitement, the pulse became 130; temperature, 100; respiration, 40; slight dulness at left apex of lung, and four days from the onset of these symptoms he sank, no danger was apprehended till within a few hours of death when he had the appearance of one collapsed; stimulants failed to rouse him.

Post Mortem we found the pia mater and arachnoid adherent to the cortex, the brain rather soft, the vessels much congested. No tubercle in lung but much congestion at both bases. Microscopically I found abundant granulation cells along the vessels of the brain and also many amyloid bodies.

This case shows how guarded should be our prognosis in acute mania especially when there is great excitement and difficulty in getting food to be taken. Such cases are most commonly lost by too long home treatment.

Cases of acute mania connected with acute diseases are generally favourable. We have recently had two following Pneumonia and both patients recovered. We have had several following or preceding Scarlet Fever, these also got well. Complications, such as drink, may make the cases less favourable; thus, in one case at present under treatment we have the puerperal state added to drink as a cause and this case is unfavourable.

I have *elsewere described cases relieved by some shock or severe pain, but will add this one at present in Bethlehem.

Louisa M., single, 30. Mother and aunt insane. First symptoms hysterical, she then became very wild, said she was made a prostitute by her brother and that her mother's eyes burned her brains, homicidal. On admission, wildly maniacal and very weak and ill, sleepless, eating fairly. Ten days after admission a whitlow appeared on her thumb and her mental excitement ceased. Now she is dull and quiet and will slowly recover.

It is common to have cases of mania at all ages, I add one cure and one death in old age.

William P., Widower, 73. Daughter insane but recovered. One previous attack ten years ago. Worry of business the given cause. First symptoms, restlessness and neglect of work, then took to propounding religious riddles. With great ideas of his powers, always talking, sleepless, appetite voracious, is said to have eaten twelve shillings worth of beef steaks in one day. The excitement lasted about a month, he was then quiet and dissatisfied for another month, and at the end of three months was discharged satisfied and well.

Charles L., Married, 73. Sister insane. Had one previous attack in 1865 and recovered. His first symptoms were sleeplessness and restlessness; he then became excited, fancied he could make spoons speak by rubbing them. He washed an old hat to make it new. The present attack followed the excitement of receivng a testimonial. On admission he was a tough wiry old man, with a sallow look, appetite good but he is not particular as to what he puts in his mouth. We tried Tincture of Digitalis for a short time and this quieted him a little but rather impaired his appetite and was dropped. Two months after admission he complained of weakness and was put to bed and in two days was dead, breathing becoming labored and mucous râles general. His brain was 50 ounces.

We have an old barrister who after some years of quiet weak-mindedness became, at 83, excited and maniacal, dressing in his wig and laying down the laws of nations, contemplating marrying and bringing up a family.

Another patient after several years of placid dementa was sane for ten days and then wildly maniacal, engaged day and night in making a Prince Consort out of a pillow.

Acute mania is seen in its most pleasant and grand way in relationship with general paralysis. In general paralysis the symptoms may be maniacal from the onset or may be periodic, and some cases seem to have maniacal attacks in place of epileptiform seijures. Maniacal attacks may precede, supplant or follow epileptic fits.

Mrs. M., a Publican, 65, Widow, rather intemperate. Had had two "fits" before, the third was unusually severe, the convulsions being mostly confined to the one side, after the fit she was unconscious for some hours and on awaking began to break everything in the house, this state continued for twenty-four hours when she became dull for a time and then recovered. She had many similar fits followed by similar attacks of mania till I discovered that Chloral Hydra given during the fits or the period of insensibility checked the mania.

We shall have no time to consider the conditions of anæmia common in mania and can only conclude by noticing a case of recurrent mania.

H. A., 60, single, a governess, who has attacks of the most furious mania every two or three months; these attacks last from six to eight weeks. For days and nights this patient shouts, sings and destroys her clothes. This has gone on for more than eleven years, and yet in the intervals this patient has perfect self-control and has preserved her memory and her intellectual powers.

It is a difficult problem why one patient after one attack of mania is left a wreck and another after dozens of attacks preserves her reason. I believe that strongly inherited cases exhibit the last power best, they are easily upset and easily reset.

*"The Practitioner," July, 1876.

TREATMENT OF ACUTE RHEUMATISM.

The following cases are intended as a sequel to a paper in the July number of the *Gazette* on "Salicylic Acid and Salicin in Acute Rheumatism." They are abstracts of nearly all the cases that have been treated by these drugs in this Hospital.

A perusal of the following cases should lead us to coincide with Dr. Maclagan in his conclusions on the great value of Salicin in the treatment of acute rheumatism (vide *Gazette*, July, 1876). In nearly all the cases it is well marked that the relief of pain and a fall of temperature occur simultaneously, and latterly it has been observed that with the fall of temperature there is a considerable and steady decrease in the frequency of the pulse.

To get the greatest good out of Salicin it would seem necessary to give it in large doses at short intervals, those cases which were treated with small doses at long intervals not doing so well as those

treated with twenty or more grains every two or three hours.

It should also be noticed that Salicin almost always prevents the occurrence of fresh attacks in hitherto unaffected joints.

Salicin is soluble to a considerable extent in hot water, and is not precipitated again on cooling.

Cases 9 to 16, except 14, are the records of seven consecutive cases admitted under Dr. FAGGE.

CASE 1.

J. W., æt. 19. Admitted May 24th, 1876. First attack. Slight apex systolic bruit. All the major joints affected. Morning temperature, 101°; evening temperature, 101·2°.

May 25th.—Morning temperature, 102°. ℞ Salicin gr. xv. every six hours. The right shoulder, left elbow and wrist are most painful now, the other joints are less painful than on admission. Evening temperature, 101·8°.

26th.—Temperature, 101·2°. Feels better. No fresh joints affected.

27th.—Temperature, 101·1°.

29th.—Morning temperature, 99·7°. Pain in limbs has entirely disappeared, with the exception of a trifle in the left shoulder. Evening temperature, 99°.

The patient steadily improved from this time, his temperature kept normal, and he was discharged June 20th, still having an apex systolic bruit.

CASE 2.

H. P., æt. 19, admitted May 3rd, 1876.

May 4th—Both knees and ankles affected. Temperature, 100·5°.

5th.—℞ Salicylic Acid gr. xv. three times a day. Temperature, 100·3°.

6th.—Temperature, 99°. Less pain in joints.

8th.—Slight systolic bruit at apex.

Patient is now convalescent, and was discharged June 3rd.

CASE 3.

J. E., æt. 22, admitted April 24th. Complains of pain all over, but especially in back and limbs; knee and ankle joints swollen and tender.

25th.—Temperature, 102°. ℞ Salicylic Acid gr. xv. every four hours.

26th.—Temperature, 101·5°.

27th.—Temperature, 100·4°. Feels better.

28th.—Temperature, 99°. No pain in any of the joints.

Was discharged May 19th.

CASE 4.

J. P., æt. 14, admitted May 3rd. Ankle, wrist, finger, and shoulder joints affected. Mitral-systolic and aortic-systolic bruits. Temperature, 100·4°.

4th.—Temperature, 102·4°. ℞ Salicin gr. x. every four hours.

5th.—Temperature, 102·2°.

6th.—Temperature, 102·8°.

7th.—Temperature, 101·2°.

8th.—Temperature, 101·2°.

9th.—Temperature, 101°. Feels better. Less pain in joints.

10th.—Temperature, 100·6°.

11th,—Temperature, 100·7°.

12th.—Temperature, 100·2°.

16th.—Temperature, 99·8°. Temperature remained normal and patient was in very little pain till June 9th, when he had a relapse. Temperature, 102·8°. Knee and ankle joints inflamed, swollen and tender.

On June 15th, the temperature was again normal, and patient progressed favourably till July 4th, when he was discharged.

CASE 5.

W. G. S., æt. 16, admitted May 25th. First attack. Apex systolic bruit. Left wrist and both knee joints affected. Temperature, 100·8°. ℞ Salicin gr. x. every four hours.

May 27th.—Right wrist inflamed and tender. Temperature, 100·4°.

28th.—Pain and swelling of fingers of right hand. Temperature, 99·6°.

29th.—Less pain in joints. Temperature, 100·4°.

30th.—Feels much better. Temperature, 100°.

June 1st.—Temperature, 102°.

2nd.—Ankles and right hand swollen and painful. Temperature, 101·4°.

3rd.—Temperature, 101·3°.

4th.—Temperature, 101·8°.

5th.—Temperature, 103°. ℞ Salicin gr. xx. every four hours. Joints not so painful and swollen. Evening temperature, 101·8°.

6th.—Temperature, 101·2°.

7th.—Temperature, 101·2°. Both shoulders, elbows and wrists are painful, also joints of right thumb.

8th.—Temperature, 101·4°.

9th.—Temperature. 101·4°. His temperature varied for the next fortnight between 100° and 99°, but he improved slowly and was discharged July 4th.

CASE 6.

S. B., æt. 20, second attack, admitted May 19th. All joints affected. Systolic basic bruit. Slight pericardial rub. Temperature, 102°.

May 20th. Morning temperature, 101·4°. ℞ Salicin gr. xx. every six hours. Evening temperature, 101·2°.

21st.—Temperature, 100·6°. Less pain in joints.

22nd.—Temperature, 99·8°. Pain and swelling now chiefly confined to shoulder joints and right leg.

23rd.—Temperature, 100°.

24th.—Temperature, 99°.

25th.—Temperature, 98°. Patient gradually improved and was discharged June 20th.

CASE 7.

E. D., æt. 17, admitted May 29th. First attack.

Attack commenced three days ago. Slight double pericardial rub. All the joints of right arm affected; left hand and fingers red and painful; right knee painful. ℞ Salicin gr. xv. every six hours.

June 2nd.—Morning temperature 102·8°; evening temperature, 103·4°.

3rd.—Morning temperature, 103·4°; evening temperature, 103·8°.

4th.—Morning temperature, 102·8°; evening temperature, 101°.

5th.—Morning temperature, 101°. Is in less pain; marked pericardial rub. ℞ Salicin gr. xxv. three times a day. Evening temperature, 102·3°.

6th.—Left hand painful; whole of right arm better. Morning temperature, 101·8°; evening temperature, 103·4°.

7th.—Right shoulder and left knee are very painful. Morning temperature, 101·2°; evening temperature, 103·6°.

8th.—Temperature, 102·4°.

9th.—Temperature, 102·5°. Left shoulder very painful.

10th.—Right knee, ankle, and heel are painful; also right elbow, wrist, and hand, but the shoulder and elbow are the most painful parts. She has now pleuritic effusion, left side. Morning temperature, 102°. Patient being very weak and anæmic she was ordered ℞ Tr. Ferri Perchlor. xv three times a day. Salicin omitted.

11th.—Temperature, 103°.

She had a long convalescence. All pain in the joints had subsided by June 21st, though her temperature was not normal till the 29th.

On July 1st there were no abnormal breath or heart sounds.

CASE 8.

C. R., æt. 43, contracted rheumatism in the ward.

April 28th.—Pain in major joints, especially those of the

upper extremity. ℞ Quinæ disus. gr. iv. times a day.

29th.—Temperature, 102·2°.

30th.—Temperature, 101·4°.

May 1st.—Great pain in all the joints. Temperature, 102·1°. ℞ Salicin gr. xv. every six hours.

2nd.—Small joints of hand affected. Temperature, 102°.

3rd.—Temperature, 99·7°.

4th.—Temperature, 100·6°.

5th.—Much less pain. Temperature, 99·6°.

6th.—Temperature, 100·1°.

7th.—Temperature, 98·8°. No pain at all.

CASE 9.

G. M., æt. 21, admitted July 25th. The major joints are swollen and tender, especially the wrists and ankles. Pericardial effusion. Temperature, 103°. ℞ Salicin gr. xx. every two hours.

26th.—Temperature, 102·6°.

27th.—Temperature, 101°.

28th.—Temperature, 99·6°. Returning pericardial rub. Joints less painful.

29th.—Temperature, 99°.

30th.—Temperature, normal. No pain at all. Patient is up and about, convalescent.

CASE 10.

E. W., æt. 19, admitted August 3rd. First attack; came on four days ago. Mitral bruit. Morning temperature, 100°. ℞ Salicin gr. xx. every two hours. Evening temperature, 100·8°.

4th.—Temperature, 100°. No pain in joints.

5th.—Temperatare, 99·6°. Presystolic bruit; systolic less distinct.

6th.—Temperature, 98°.

8th.—Temperature, 98·4°. No pain at all.

CASE 11.

M. B., æt. 20, admitted August 3rd. First attack; came on four days ago. Roughness at base, but not distinct; at apex, first sound somewhat roughened. Ankles red and painful; knees swollen. Temperature, 102·8°. ℞ Salicin gr. xx. every two hours.

August 4th.—Temperature, 101·8°.

5th.—Temperature, 100°. No pain at all.

6th.—Temperature, 98·2°.

7th.—Temperature, 98·4°. No pain.

CASE 12.

J. C., æt. 18, admitted August 9th. Second attack; became ill four days ago. right wrist very swollen and painful, œdema around fingers, tenderness of joints of lower extremities, a little swelling of left knee. Systolic apex bruit, probably old. ℞ Salicin gr. xx. every two hours. Temperature, 103°.

August 10th.—Temgerature, 102°.

11th.—Temperature, 101·8°.

12th.—Temperature, 100·4°. Sweating.

13th.—Temperature, 99°. Pain in right shoulder and hip only.

14th.—Temperature, 98·4°. A little pain in shoulder.

15th.—Temperature, 98·4°. No pain in joints.

18th.—No pain. Temperature, 98·4°.

CASE 13.

W. H., æt. 18, admitted August 11th. First attack; became ill four days ago, but has had wandering pains for some weeks past. Has pain and swelling in left wrist and left ankle; some effusion into left knee; some other joints rather painful. Temperature, 100·8°. ℞ Salicin gr. xx. every two hours.

12th.—Temperature, 100·5°.

13th.—Temperature, 100°.

14th.—Temperature, 98·4°. No pain at all.

15th.—Temperature, 98·4°.

18th.—Temperature, 98·4°. No pain.

CASE 14.

M. M., æt. 28, admitted July 10th. First attack. Redness and swelling of both feet and ankles; slight tenderness of joints of fingers of left hand; right wrist and hand painful and swollen. Faint systolic apex bruit. ℞ Mist. Pot. Int. ℥j. every four hours. Temperature, 102·8°.

July 11th.—Morning temperature, 101°; evening temperature, 103°.

12th.—Morning temperature, 101·4°. Pain in right clavicle, fourth and fifth fingers, thumb, and wrist of left hand. ℞ Salicin gr. xx. every two hours. Evening temperature, 102°.

13th.—Temperature, 100·6°. Pain and swelling in all the joints better, except left wrist.

14th.—Temperature, 100°. No pain, except in clavicle.

15th.—Temperature, 99·2°.

16th.—Temperature, 98·4. No pain anywhere.

20th.—Medicine omitted. Discharged August 12th.

CASE 15.

S. K., æt. 32, admitted August 15th. Second attack; taken ill three days ago. Effusion in knee; wrists and ankles swollen, painful and red. Temperature, 103°. ℞ Salicin gr. xx. every two hours.

August 16th.—Temperature, 100·4. Pain less in joints.

17th.—Temperature, 99·5°. No pain anywhere.

18th.—Temperature, 99·4°. No pain.

CASE 16.

M. M., æt. 23, admitted August 15th. Sixth attack. Both wrists and fingers of each hand are red and painful; also the ankles; some effusion into right knee. Much dyspnœa. Cardiac dulness begins at third rib; apex beat, normal; systolic bruit at apex and in axilla. Has pain over heart; both bases dull and breath sounds deficient; tactile vibration absent. Temperature. 104°. ℞ Salicin gr. xx. every two hours.

August 16th.—Temperature, 102·4°.

17th.—Temperature, 101.4°. A little pain in left hand.

18th.—Temperature, 98·4°. No pain at all. Patient feels much better.

GYNŒCOLOGY.

A. R., æt. 27, Mary Ward.

Her first pregnancy was in January, 1875, when after she had been for many hours in labour under a midwife, Dr. A. THOMPSON was sent for, who detected the difficulty of the case, seeing that it was impossible to deliver by forceps or turning, and finding that perforation, the crochet and craniotomy forceps did not enable him to draw down the head. Dr. HICKS was asked to assist with the cephalotribe. He found the conjugate diameter to be about two inches, and the transverse diameter, cavity and outlet much below the standard. The cephalotribe was applied in the transverse diameter, and by means of this instrument and the crochet the labour was concluded after some difficulty both in drawing down the face, and in causing the chest to descend.

She became pregnant a second time in March, 1876, and upon her consulting Dr. HICKS he advised her to come to this hospital in the sixth month of pregnancy, as it would be unadvisable to allow pregnancy to continue after this time on account of the dangers which might then attend her labour, whereas at the end of the sixth month a living child might possibly be born. She was consequently admitted on 22nd August.

On August 23rd, a bougie was introduced between the fœtal membranes and the wall of the uterus. As

this failed to excite uterine contraction within forty-eight hours, the membranes were ruptured after that time by means of a stiletted catheter, and the amniotic fluid was allowed to flow. This was followed after a few hours by slight pains, indicating uterine contraction.

On the following day (August 25th) there was shivering and retching. The os was slightly dilated, and the pains were more frequent and severe. Pulse, 130; temperature, 103°. Chloral Hydrat gr. xv., Lig. Morph. Hydrochlor. ℥v., Mist. Effervescens iv. tis horis. In the evening the cord was found to present, and through the os the fingers could be distinguished above which was the vertex Since there was no pulsation in the cord, and the age of the child was of less than seven months, it was thought unnecessary to attempt version or interfere in any way, and during the night the child was born spontaneously, the vertex presenting. The placenta was expelled within half-an-hour, and the patient made a good recovery.

FOREIGN JOURNAL.

SANGALLI ON THE CONDITIONS OBSERVED IN THREE CASES OF ABSENCE OF KIDNEY.—In 5,348 necropsies Professor Sangalli met with the following anomalies in the kidneys.

Absence of the kidney was found in three cases, all males, among the 5,348. All the individuals were otherwise well formed and had been of ordinarily robust constitution. They died of diseases having no relation to the anomaly of the kidneys; one (aged twenty-five) of metastatic (pyæmic) abscess of the liver after a wound of the head; another (aged forty-nine) of rheumatic pleuro-pneumonia and consecutive meningitis; the third (aged forty-six) of phlegmonous erysipelas of the right hip, with metastatic peritonitis and pleurisy, and albuminous nephritis. In one case the right kidney was wanting; in two, the left. In the first case, the remaining kidney appeared to be simply hypertrophied to twice the natural size, and in the second, it was increased through hypertrophy by about one-third and was affected with incipient albuminous nephritis; in the third, the kidney was enlarged by about one-half by hypertrophy and by chronic albuminous nephritis. In each of the cases, the kidney occupied the usual position, and the ureter was normal.

The suprarenal capsule was present in its normal position on both sides in each of the three cases; in one case it was larger on the side where the kidney was absent than on the other.

In addition to the absence of the kidney—of which no trace could be found in these three cases—the vesicula seminalis and ejaculatory duct on the same side were wanting, although both testes were perfect.

This anomaly, Dr. Sangalli says, has not been described by others. On endeavouring to ascertain what became of the semen secreted on the side where the defect existed, Dr. Sangalli found in one of these cases that, on the side where the kidney was present, the vas deferens was normal in size and course; but at the other (left) side it was slender, and, after entering the pelvis beneath the fundus of the bladder, passed obliquely to join the right spermatic vesicle, into the vas deferens of which it opened about a centimètre from the point of entrance of the right ureter into the bladder.

Med. Record.

SAVORY & MOORE'S

SPECIAL PREPARATIONS.

GENUINE PANCREATIC EMULSION AND PANCREATINE. Administered in Diseases where Wasting, Loss of the Power of Digestion and Assimilation are prominent symptoms.

BEST FOOD FOR INFANTS. Resembles Mother's Milk more closely than any other kind of Food, perfectly fulfilling its object, that of promoting the GROWTH and HEALTH of the Child.

DATURA TATULA. For the Relief of Asthma and Chronic Bronchitis. Prepared in all forms for Smoking and Inhalation.

TINCTURE OF GELSEMINUM. Prescribed for Neuralgia, Toothache, &c.
Vide DR. SPENCER THOMPSON'S Paper, "On the Rapid Relief of Neuralgic Pain" in *Lancet*, Nov. 6, 1875.

PEPTODYN combines the active principles of the Digestive Secretions and effects the Digestion and Assimilation of the various kinds of Food, the Farinaceous, Fibrinous and Oleaginous.

PEPSINA PORCI AND **PEPSINE WINE.** } Best Quality. Supplied in small bottles or in bulk. On account of their large manufacture of Pancreatic Preparations, Messrs. SAVORY & MOORE are enabled to offer them (in quantity) at lower rates.

MEDICATED GELATINE DISCS (Patent) For Opthalmic and Hypodermic use.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

JOHN B. MEDLAND,

MICROSCOPE & SCIENTIFIC INSTRUMENT MAKER.

MEDLAND'S STUDENTS' MICROSCOPE, COMPLETE £3.
An excellent Working Instrument.

EVERY DESCRIPTION OF APPARATUS FOR MICROSCOPICAL PURPOSES, MOUNTING FLUIDS, GLASS SLIPS, CELLS, THIN GLASS COVERS, &c., &c.

CLINICAL THERMOMETERS from 7/6. URINOMETERS from 3/6.

Photographs of Guy's Hospital, Portraits of Guy's Medical Staff, Eminent Medical Men, &c., &c.

10a, BOROUGH, LONDON BRIDGE
(CLOSE TO THE RAILWAY ARCH).

SMITH, ELDER & CO.'S TEXT-BOOKS.

HOLMES'S PRINCIPLES AND PRACTICE OF SURGERY.

With upwards of 400 Illustrations, Royal 8vo. 30/-

SURGERY: ITS PRINCIPLES AND PRACTICE.

By TIMOTHY HOLMES, F.R.C.S., Surgeon to St. George's Hospital.

"A most complete and accurate surgical text-book. It is an extremely fair exposition of British Surgery. We have no hesitation in recommending this work as by far the best of existing surgical text-books; it is well up to the time; it exhibits a thorough acquaintance with surgical literature and practice, is characterised by the most impartial fairness, and is written in excellent English."—*Medical Times.*

PLAYFAIR ON MIDWIFERY.

2 vols. demy 8vo, with 166 Illustrations, Price 28/-

A TREATISE ON THE SCIENCE AND PRACTICE OF MIDWIFERY.

By W. S. PLAYFAIR, M.D., F.R.C.P., Professor of Obstetric Medicine in King's College, Physician for the Diseases of Women and Children to King's College and Hospital, Examiner in Midwifery to the University of London, and lately to the Royal College of Physicians, Vice-President of the Obstetrical Society, &c.

"These volumes will, from the honest purpose of their author and the ability of its execution, at once take a position in the highest rank of obstetric works, and must prove a useful guide in this most anxious and responsible branch of the profession."—*Lancet.*

Demonstrations of Anatomy: being a Guide to the Knowledge of the Human Body by Dissection. By GEORGE VINER ELLIS, Professor of Anatomy in University College, London. Seventh Edition, Revised. With 248 Engravings on Wood. Small 8vo, 12/6. The number of Illustrations has been largely added to in this Edition, and many of the new Woodcuts are reduced copies of the Plates in the Author's work, "Illustrations of Dissections."

A Text-Book of Electricity in Medicine and Surgery, for the use of Students and Practitioners. By GEORGE VIVIAN POORE, M.D. Lond., M.R.C.P., &c., Assistant Physician to University College Hospital, Senior Physician to the Royal Infirmary for Children and Women. Crown 8vo, price 8/6.

A course of Practical Histology. By Edward Albert Schäfer, Assistant Professor of Physiology, University College. With Illustrations. [*Nearly ready.*

A Manual of Toxicology, including the Consideration of the Nature, Properties, Effects, and Means of Detection of Poisons, more especially in their Medico-Legal Relations. By JOHN J. REESE, M.D. 8vo, 12/6.

A Guide to Urinary Analysis for the Use of Physicians and Students. By Henry G. PIFFARD, A.M., M.D. 8vo, 7/6.

A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, A.M., M.D., LL.D. Fourth Edition, Revised and Improved. With 322 Illustrations. 8vo, 28/-

An Introduction to the Study of Clinical Medicine: being a Guide to the Investigation of Disease, for the use of Students. By OCTAVIUS STURGES, M.D. (Cantab.), F.R.C.P., Physician to Westminster Hospital. Crown 8vo, 4/6.

The Essentials of Bandaging; with Directions for Managing Fractures and Dislocations, for administering Ether and Chloroform, and for using other Surgical Apparatus. With 128 Engravings. By BERKLEY HILL, M.B., F.R.C.S., Professor of Clinical Surgery in University College, Surgeon to University College Hospital, and Surgeon to the Lock Hospital. Third Edition, Revised and Enlarged, with a new Chapter on Surgical Landmarks. Post 8vo, 4/6.

Notes of Demonstrations on Physiological Chemistry. By S. W. Moore, Joint Demonstrator of Practical Physiology at St. George's Medical School. Crown 8vo, 3/6.

London: SMITH, ELDER & Co., 15, Waterloo Place.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine and Surgery.

NEW SERIES.—No. 11. NOVEMBER, 1876. SIXPENCE.

CONTENTS.

Clinical Lecture on the Destructive Action of the Electric Current 123

Clinical Lecture on Enlargement of the Liver 125

Leading Article 128

Physical Society 129

Mental Diseases 132

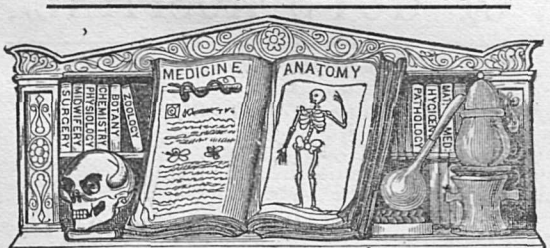
Report of a case of Pleuro-Pneumonia 133

The Conversazione 134

Case of Unilateral Kidney 134

Football Club 134

3d. IN THE 1s. OFF MEDICAL BOOKS.



H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE.

Books Bought or taken in Exchange. A number of cheap Anatomical Plates for Sale.

SESSION 1876 & 1877.

*** *Gentlemen Students of Guy's are respectfully requested before purchasing at any other House to send or call for "Grattan's New List."*

Druitt's Surgeon's Vade-Mecum	(12/6)	9/6
Garrod's Materia Medica and Therapeutics	(12/6)	9/6
Gray's Anatomy, Descriptive and Surgical	(28/-)	21/-
Heath's Practical Anatomy and Dissector...	(12/6)	9/6
Hooper's Physician's Vade Mecum	(12/6)	9/6
Huxley's Classification of Animals	(6/-)	4/6
Kirke's Handbook of Physiology	(12/6)	9/6
Roscoe's Elementary Chemistry	(4/6)	3/6
Wagstaffe's Guide to Human Osteology ...	(10/6)	8/-
Ward's Human Osteology	(7/-)	5/3

&c., &c., &c.

Students Note and Case Books in great variety.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.

TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, *in great variety at moderate prices.*
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

DISSECTING CASES AS USED AT GUY'S HOSPITAL.

Dressers Pocket Cases and Cases of Catheters

LARGE ASSORTMENT OF STETHOSCOPES AND CLINICAL THERMOMETERS.

INSTRUMENTS OF VARIOUS KINDS, AND APPLIANCES, SPLINTS, &c., &c., suitable for Gentlemen commencing Practice, also for Hospitals, Infirmaries, &c.

OPPOSITE BACK ENTRANCE OF GUY'S HOSPITAL.

Medical and Surgical Practice in London.

HOURS OF ATTENDANCE OF STAFF.

HOSPITAL.	MEDICAL. Daily.	SURGICAL. Daily.	OBSTET.	OPHTHAL.	DENTAL.
Charing Cross ...	1 p.m.	1 p.m.	Tu. F. 1.30	...	M.W.F., 9
Guy's	1.30 p.m.	1.30 p.m.	M. W. F. 1.30.	M.Th. 1.30 Tu. F., 12.	Tu. Th. F. 12
King's College ...	2 p.m.	1.30 p.m.	M. W. F., 1 p.m.	M.Th.,S. 1	Tu. F., 10
London	1.30 and 2 p.m.	1.30 and 2 p.m.	...	W. S., 9	Tu., 9
Middlesex	1.30 p.m.	1 p.m.	M.W., 1.30	Tu.F.,8.30	Daily, 9
St. Bartholomew's	1.30 p.m.	1.30 p.m.	M. Th., 2 W. S., 9.	Tu.Th. S., 1.30.	Fr., 9
St. George's... ...	1 p.m.	1 p.m.	Th., 2.	W. S., 2	Tu.S.,9.30 Th., 1.30
St. Mary's	1.15 p.m.	1.15 p.m.	Fu.F.,9.30	M.Th. 1.30	W. S., 9.30
St. Thomas's ...	8.45 a.m.	8 a.m.	W.F. 12.30	Daily, 2, ex. S.	Tu. F., 10
University College	1.15 and 2.30 p.m.	1.30 and 2 p.m.	Daily, 1.30 ex. W. & S.	M. W.F., 2	W., 10.30
Westminster ...	1.30 p.m.	1.30 p.m.	Tu. F., 3.	M. Th., 3	W. S., 9.15

ON DUTY FOR NOVEMBER.

House-Physicians:—Messrs. M. Lubbock and Finch.
Junior House-Physician:—Mr. F. C. Coley.
House-Surgeon:—Mr. H. N. Smith.
Junior House-Surgeon:—Mr. A. Finch.
Senior Resident obstetric:—Mr. F. W. Romano.
Junior Resident Obstetric:—Mr. F. C. Coley.

RESIDENT DRESSERS.

For the weeks commencing—

November 1st, Mr. W. C. James (Mr. Forster).
„ 8th, Mr. J. Mackern (Mr. Bryant).
„ 15th, Mr. H. W. Ewen (Mr. Durham).
„ 22nd, Mr. W. O. C. Tarrant (Mr. Howse).
„ 29th, Mr. W. N. Evans (Mr. Forster).

Mr. C. J. Symonds (late House-Surgeon and present House-Physician) and Mr. R. E. Carrington (late House-Surgeon) have been appointed Assistant Demonstrators, the present Demonstrators remaining in place

Clinical Lecture

ON THE DESTRUCTIVE ACTION OF THE ELECTRIC CURRENT (ELECTRIC CAUTERY), AND ITS APPLICATION IN PRACTICE.

By C. H. GOLDING-BIRD.

The electric cautery is an immense improvement upon the old form of "actual cautery." Besides being more elegant, it is more convenient, and is in many cases the only form of cautery that can be employed.

Its principle of action depends upon the heating of a platinum wire by the passage of an electric current. Why should this heating occur? Because no force in nature can be lost, and the electricity is converted into heat by being suddenly arrested in its enormously rapid rate of travelling at 288,000 miles per second. The current is brought from the battery by a good conductor of copper or of brass, but when it reaches the platinum with which we operate, it is retarded in its progress, both on account of the small bulk of metal it now has to traverse and because platinum is a vastly inferior conductor of electricity to brass or copper.

This instrument (the galvanic ecraseur) best illustrates what has been just said; and on connecting it with this Bichromate battery you will observe that the platinum wire which emerges from the ends of the two brass terminals of the electrodes becomes at once red-hot.

A familiar and parallel example of this convertibility of force is seen in the rapid bringing-up of a train by the application of the breaks: the heat developed at the wheels measures to a great extent the speed with which the train was moving, and the rapidity with which it was stopped.

An electric current may be obtained by the application of heat to a piece of metal; such a mode of producing a current being in some degree the converse of what we have just considered, viz., the conversion of a current of electricity into heat. Here is a piece of zinc wire attached by its extremities to a delicate galvanometer; on heating the zinc, the needle will be at once deflected. An instrument (thermo-electric pile) was long ago constructed to give a very sensible electric current by means of heat, but it is only lately that such a pile—or combination of piles—has been rendered effective in producing heat sufficient for surgical purposes. One element of such a pile is on the table; it is composed of antimony and bismuth.

Here are the several instruments commonly used in our operating theatre. First among these comes the galvanic ecraseur; it needs no further description than to say that it acts as an ecraseur with a red-hot wire. The ordinary ecraseur (*e.g.*, polypus snare) acts by crushing or tearing the tissues it is made to encircle, and by roughly "torsing" the vessels prevents hæmorrhage; the galvanic ecraseur not only does this, but, by being heated all the time, more certainly ensures the closure of the vessels, and removes the part with greater expedition. That the wire can be placed cold round the parts to be removed, and heated after being properly adjusted, is of the greatest service, and is a result obtainable only by the galvanic current. Some caution is, however, required in using this instrument. If used too rapidly, and if the wire be made too hot, the vessels will not have their mouths sealed by an eschar, but will be left open and bleeding. Also, it should be borne in mind that, when the wire is being screwed up, and the loop made smaller towards the close of the operation, it is heated in a degree that increases as the length of the wire decreases, and, therefore, care must be exercised, lest just at the last the wire become fused.

Another most useful instrument is a simple loop of wire projecting from a suitable handle; it can, if beaten our flat, be made to cut like a red-hot knife; or if fine and pointed can be thrust into growths or cavities, or wherever else deep cauterization may be requisite.

For burning a flat surface, a porcelain button is employed; the button is fastened to the adjacent extremities of the two brass electrodes, and a platinum wire connected with these is wound round it. The wire becomes heated and communicates its heat to the porcelain.

Other instruments have been adapted to particular purposes. I need not mention any, unless it is to warn you against this one—a species of catheter, which you are expected to pass down a man's urethra and burn out his stricture! If employed thus the result would probably be what was intended to follow the only application I ever saw of this instrument, viz., the complete obliteration of the urethra.

Apart from those advantages in the galvanic cautery that have been alluded to, we may say that its greatest claims are in the same degree of heat being maintained throughout the operation; that the heat can be regulated to a nicety in any particular case; and that it can be employed in the destruction of deeper parts, while the more superficial are unaffected.

The cases in which it is most commonly employed are those in which it is desired to prevent or control hæmorrhage, *e.g.*, amputation of the penis, removal of the whole or part of the tongue, extirpation of growths either vascular in themselves, or implanted upon a vascular structure, as warts upon the labia, and in the removal of piles. This last deserves a special notice. Where a cautery is obtainable always employ it in this operation; if you have once seen it done, or done it yourself—still more if ever you have had it done on yourself—you will never of your own free will return to the ligature. This latter is both painful for many days and you don't feel quite easy till the last piece of silk has come away; but if the cautery is employed, all anxiety may be truly said to cease with the operation; and unless your operation should happen to have

involved any of the skin about the anus, the pain suffered afterwards is practically nothing. You should then first clamp the pile in a line radiating from the centre of the bowel; then cut it off; and then, having brought your "porcelain button" to the required temperature, sear the raw surface and produce a black eschar. If properly performed scarcely a drop of blood is seen, and the burnt surface is then returned, the mouths of the dilated vessels that have been cut through being firmly sealed. The ordinary cautery, or iron heated in the fire, can of course be used here, and should be used if no other heating apparatus is at hand; but it is more clumsy, and it is very much more difficult to obtain, and impossible to maintain, the exact temperature. The iron soon cools down, and, if used too hot at first, the pedicle of the hæmorrhoid is simply "frizzled" off and no eschar is formed, and free hæmorrhage is the result.

Parts inaccessible to any other form of cautery may be reached by the galvanic ecraseur, to encircle and extirpate a tumour, or by the porcelain button to destroy a morbid surface. Thus, it is frequently employed in operations upon the cervix uteri; or upon a small vesico vaginal fistula situated high up in the vagina; or—as I have already mentioned—upon the urethra, if you want to obliterate it; or deeply in the nasal cavity for the removal of polypi. On one occasion having removed a partly fibrous naso-pharyngeal polypus from the base of the skull (body of sphenoid) I passed the platinum wire through the nose, and having pressed it against the base of the skull by the help of the finger introduced through the mouth, completed the electric circuit, and so cauterised the pedicle of the tumour.

It is a fact worthy of notice that the pain after the use of the galvanic cautery is but slight compared to that produced by the ordinary heated iron; the greater heat employed and maintained throughout may cause the destruction of nerve filaments, or at least of their sensibilty, for some distance from the actual seat of the operation.

There is yet a disease of the most frequent occurrence, and therefore deserving particular attention, in the treatment of which the galvanic cautery is especially useful: I refer to vascular tumours or nævi. So frequently will you be called upon to operate upon them, that a word upon their nature will not be out of place. Nævi or angiomata are tumours consisting of dilated and tortuous vessels held together by connective tissue. There are as many different varieties as there are blood vessels in the body, capillary, venous, and arterial; each has its own characteristics and special mode of treatment.

1.—Capillary nævi. These are made up of a multiplication and dilatation of the smallest vessels or capillaries, which may be massed together so as to form a tumour, or may be extended over a wide surface, even over an entire limb. They are usually seated in the skin or subcutaneous tissue, or in both; at times they are found in the deeper parts of the body. If cutaneous, they are scarlet in color, and if the component vessels are much dilated, a very soft elevation is produced, the so-called "strawberry mark;" where the vessels are only numerically increased, a red stain results, the "port wine" stain, that often is seen disfiguring the face. Pressure empties the vessels of their blood; an important point in the diagnosis of the subcutaneous tumours.

2.—Venous nævi (erectile tumours) are less common, and consist not only of dilated veins, but of cavenous tissues. They are particularly dangerous from fear of hæmorrhage should they become wounded. To the hand they resemble a sponge soaked in fluid thrust under the skin.

3.—Arterial nævi are at once recognized by their pulsation, and consist of numerous arteries—some as large as a radial—inosculating together in a circumscribed area.

The two last-mentioned forms of vascular tumours have scarcely anything to do with the cautery, being, as a rule, either treated with the ligature or by extirpation: it is among the capillary nævi that there is the greatest range for varying treatment, and for employing the galvanic cautery. Nature herself at times brings about a cure in the subcutaneous nævi by causing them to inflame, or by conversion of their substance into cysts, or more usually into fibrous tissue. If it be desired to interfere with them, their size and situation must be the best guides to treatment. At your disposal you have the ligature, extirpation with the knife, pressure, vaccination (to produce adhesive inflammation, and so obliteration of the vessels), and injection with perchloride of iron. This last is not free from danger; clots may be carried along in the venous circulation with fatal results; to avoid this, breaking up of the vessels with a needle prior to injection has been proposed. Often in subcutaneous nævi it is desired to save the skin over the growth; for this purpose the heated fine wire of the galvanic cautery is peculiarly useful. One case will illustrate this:—A child was brought some months ago to my out-patients' room with a subcutaneous nævus occupying the outer two thirds of the lower eyelid and the adjacent part of the cheek. With the exception of one spot the size of a sixpence, where the skin was involved, the growth was entirely subcutaneous. For several reasons it was here especially important to save the skin, the loss of which might eventually have given rise to ectropion; so the treatment I adopted was to pass the heated galvanic wire through the spot where the skin was involved and cause it to burrow in every possible way, till even the glow of the wire shone through the skin. On three occasions was this repeated, the wire entering always at the same spot, and now, though some nævoid tissue remains, it is not only considerably reduced in size, but has ceased to grow, and I shall therefore leave

it in the hope that nature will complete the cure by the conversion of the vessels into fibro-cellular tissue.

At times, by this treatment, suppuration is induced, and then, though the growth is destroyed, the skin over it is more or less sacrificed; but since, with the exception of that of the face, it does not much matter whether the skin be saved or not, it is one of the most ready and effectual means that can be employed. The electrotytic treatment of nævi is much praised by some surgeons: it is not a caustic, nor a cauterising means of destroying them, but depends upon a degenerative change, the result of keeping a powerful continuous current passing through the growth for a short time; the electrodes being platinum needles thrust into the nævus. In my hands, and, indeed, in the hands of those who have tried this plan in this Hospital, success has not followed; indeed, Dr. Althans himself states that cutaneous nævi are more easily destroyed by this plan than the subcutaneous, and this I have too found; but my impression is that, even in the cutaneous nævi, as much good is done by the breaking up of the vessels in the passage of the needles, as by the transmission of the electric current.

The strictly cutaneous nævi may be treated by the cautery in one of two ways: where but a small surface is affected, the "porcelain button" at once destroys the growth; but where a large surface is involved such wholesale destruction of the skin is not allowable. Many must be left to take their own course, but rapidly pricking the surface over with the heated wire is at times effectual; it not only destroys all it touches, but the sudden shrinking of the burnt tissue causes—as any one may see—a drag on the skin immediately surrounding, and consequent anæmia; a condition of things permanently maintained by the after contraction of the resulting cicatrix.

Clinical Lecture,

October 8th, 1876,

ON ENLARGEMENT OF THE LIVER.

By Dr. HABERSHON.

It is not sufficient for the practice of medicine to be content with the fact that a patient has *enlargement* of the *liver*. "The refuge for the destitute" was the expression of Dr. Addison when speaking of those who hid their ignorance under the mere statement of liver disease; thus to satisfy the enquiries of the patient and their own conscience. I have several instances of disease of the liver and of different kinds to bring before you.

CASE I.

Maria Q., æt. 60, was admitted into Clinical Ward with the following history:—3 months before admission she caught a violent cold; soon afterwards violent "inflammation of the bowels and kidneys" came on: these lasted for 3 days and left the patient very weak. She returned to work, but took fresh cold, and was soon compelled to give up altogether. A month ago dropsy appeared in the feet and legs, and gradually passed upwards. There was never any great amount of œdema of the legs, but it extended to the loins: the urine was scanty, its sp. gr. 1013, and it contained albumen. The abdomen was much swoolen. The lungs were normal, but at the apex of the heart there was a systolic bruit. The liver was considerably enlarged, and extended to the umbilicus. The action of the heart became more irregular, and a presystolic bruit became audible. Tincture of digitalis with chloric ether was given and purgative medicine; her symptoms are now relieved, but there is great weakness: a systolic bruit remains, and there is still enlargement of the liver.

In this patient have we a case of hepatic disease? Are we to look upon *that* as the disease from which she suffers? Certainly not. The derangement of the liver is only secondary to the impeded cardiac circulation. There is no doubt of its enlargement, we trace it by the ordinary boundary line of percussion; the usual portion of dulness from 10th or 11th dorsal vertebra to 7th intercostal space in the axillary line, and then to the 5th below the right nipple, a slight curve upwards; the lower border in men is just below the margin of the ribs. Here, however, the border reaches to the umbilicus, and there is no doubt that the gland is enlarged. Sometimes, however, the enlargement is an apparent, but not real increase in size.

1.—The liver may be pushed down by tight lacing.

2.—The liver may be pushed down by effusion into the right pleura.

3.—The liver may be pushed down by the formation of cysts in the liver, as hydatid, although the surface is perfectly smooth.

4.—The liver may be pushed down by the collection of fluid, pus or serum, between the upper surface of the liver and the diaphragm.

5.—There may be curvature of the spine, which pushes forward the gland below its normal position.

6.—In women the liver is generally lower than in men.

There is no evidence, however, that in this case there are any of these sources of fallacy; there is enlargement, and we are led to enquire what are the causes of this general enlargement, and how can we distinguish the one from the other.

1.—The liver is enlarged from congestion of its vessels; a passive congestion from the obstruction of the circulation in the lungs, or in the heart. The hepatic veins become distended, the centre of the lobules engorged, the whole capillary circulation is distended, but especially the centre of the lobules,

causing the irregular mottled appearance known as "nutmeg liver."

2.—It is enlarged from distension of the bile ducts in simple obstructive jaundice.

3.—It is enlarged in acute inflammation and in abscess.

4.—In chronic inflammation, when that has invaded Glisson's capsule and permeated the liver structure in cirrhosis.

5.—In chronic hypertrophic changes of the liver, often tending to jaundice.

6.—In fatty deposit in the liver, as we find in phthisis and in acute poisoning by phosphorus.

7.—In lardaceous disease.

8.—In cancerous disease of varied kinds.

The liver is irregularly enlarged from the formation of hydatid cysts, and from syphilitic disease or tumour.

It is nodulated in cirrhosis and in atrophic changes, so also when cancerous tubera are deposited in it.

The liver is small in acute yellow atrophy, as well as in advanced cirrhosis.

In distension of the gall bladder there is a pyriform projection which stimulates tumour in the liver itself.

In the case I have narrated the liver is enlarged from chronic congestion; this state, however, never becomes true cirrhosis of the liver, such a statement is, I believe, erroneous; the surface becomes irregular as the gland tissue wastes, and the gland is less congested. but there is no thickening at Glisson's capsule. The presence of the heart disease guides us to a correct diagnosis; it is true there might be an increase of the congestion from intemperate habits, but of this we have no proof. The gland becomes wasted, the secretion of bile is interfered with, and jaundice is often produced, although more frequently mere sallowness. In this jaundice, however, there is no obstruction of the ducts, but it is mal-elimination of the biliary elements: do not mistake this for simple obstructive jaundice. The action of the bowels is often dark, although sometimes for a time pale in colour. This secondary symptom is an important indication of the state of the abdominal viscera and may be relieved by treatment; the kidney and the mucous membranes are in a similar state of engorgement, and the urine as in this case scanty. Try and relieve the heart by lessening these congestive conditions. Give calomel, squills and foxglove act on the bowels; give diuretics, as acetate, nitrate, citrate, iodide of potassium. If the calomel irritate, give blue pill, or the black oxide of mercury; or what is a good remedy in these cases, the subcodide of mercury in 1 grain doses. If the kidneys act freely, and the liver is less turgid, the cardiac symptoms are proportionately mitigated.

CASE 2.

The next case of enlargement of liver is in a little boy, Fred. W. G., aged 5; he is in No. 34, admitted September 5th. 8 months ago this little patient began to have jaundice and relaxation of bowels, his stools were very pale and his urine dark. He attended as an out-patient and was relieved, and for 2 months remained well. In 3 weeks the symptoms re-appeared. He was then admitted into the Hospital, but left in about 3 weeks without having derived benefit. Since then he has lost strength, and the jaundic has continued. On re-admission the report states that the jaundice is not deep in colour; the conjunctiva, tinged; the tongue is furred, on the lower tip there is a small fissure, from which the blood occasionally spurts. Temperature, 100·2°. Pulse, 96. Heart dulness, normal, and there is no bruit. The lungs are healthy. The dulness of the liver extended $3\frac{1}{2}$ inches below the ribs, and the splenic dulness reached to the margin of the 11th rib. The urine contains bile pigment, but no albumen. There was no evidence of fluid in the abdomen. The abdomen afterwards increased in size, and now, October, it is $28\frac{1}{2}$ inches in circumference, fluctuation is distinct in the abdomen; the veins are enlarged, but the liver extends now in the mammary line $2\frac{1}{4}$ inches below the margin of the ribs, in the median line 4 inches below the ribs; the surface is smooth, the edge may be defined. The temperature is 101°. Pulse, 130. The spleen can be felt below the margin of the ribs.

There can be no doubt of the hepatic enlargement in this case, but what is the cause? There is no evidence of disease of the heart or lungs to account for it. It is probable that, if the disease were lardaceous, there would be an albuminous condition of the urine. Then, again, in lardaceous disease we do not find a jaundiced condition. Enlarged glands in the neighbourhood of the ducts might produce pressure upon them, and interfere with the free passage of bile; but no glands have been felt and there are no glands enlarged in the neck. There appears to be chronic inflammatory enlargement of both the liver and the spleen, and the question arises is this due to syphilis? Is it the result of the use of ardent spirits? Or is it produced by mal-nutrition from other causes? There is no proof of any improper use of spirits. The clinical history in the partial recovery is not that of malignant disease, which sometimes takes place in early life. The chronic inflammatory hypertrophy, which leads to jaundice, with gradual prostration and failing power, is a condition which I have only observed in adult life, and I am disposed to refer this to the mal-nutrition, perhaps a syphilitic taint. The ascites has come on gradually, the abdominal veins are enlarged, and there is evidence of increase of disease in this increased interference with the circulation. The blood is becoming changed in character, as shown by the tendency to purpura and to hæmorrhage, the latter from the lip, and the former in the spots on the legs. The prognosis in this case is unfavourable, for although jaundice comes on in young persons and children from simple obstruction of the bile ducts, the duration is too long for such form of disease and the weakness too decided. It will be well to try the effect of iodide of potassium with simple

nourishing diet and gentle laxative medicines.

The third case is one of enlargement of the liver causing ascites, probably from cirrhosis.

No. 11 BED.

William Davis, aged 47, is a shoemaker, who has for many years been troubled with difficulty in micturition, but he continued in his usual health till 7 weeks since; when, after getting wet, his feet began to swell, and remained so for a fortnight. About 3 weeks ago his abdomen began to swell and increased in size since, the urine at the same time was increased in quantity and became high coloured. He has been troubled with diarrhœa for some months, and has passed blood in his motions. For 2 or 3 months he has been troubled with cough, with tenacious expectoration; the cough has been sometimes so severe at night as to produce orthopnœa. There has been loss of strength during several months. There was no dyspnœa or distress on admission. The skin moist. The tongue clean. The abdomen generally distended, fluctuation distinct, the circumference 36¼ inches, the lumbar regions were bulging and the fluid gravitated. There was no œdema of the feet on admission, but the distension of the abdomen was too great to allow of the liver being felt. The superficial veins were enlarged. In the chest some mucous râles were audible at the base of the right lung. The heart sounds, normal. The urine scanty, high coloured, tinged with bile, s.p. gr. 1030, no albumen and no sugar in it, but abundant deposit of urates.

On the 30th passed about 11 ozs. of urine. Copaiba resin in gr. xv. doses was given.

The following day, October 2nd, he passed 1 pint 2 ozs.

On the 3rd, 2 pints 11 ozs.

On the 5th, 3 pints 4 ozs. The circumference of the abdomen lessened to 35 inches; the liver could be felt; the surface smooth, the edge thin, and it extended 1½ inch below the ribs.

On the 6th, circumference 34¼ inches.

The ascites is evidently less from the diuretic action of the copaiba resin, and the patient is relieved. He is free from pain, in fact pain has never been a symptom of disease.

In this case we have a somewhat complex condition, for although there is enlargement of the liver and consequent ascites, it did not commence as simple ascites from cirrhosis usually does; in this latter disease the abdomen is first swollen, whilst the legs are thin and wasted; here, however, the legs were œdematous first and remained so for several weeks before the abdomen increased. This circumstance was probably due to bronchitis, from which he appears to have suffered at first, and some of which persists. He has been free in his habits, too partial to stimulants, and the disease of the liver, which had gradually increased, was rendered more severe by the exposure to cold and wet, and consequent bronchitis. The condition of the chest is, however, quite insufficient to account for the ascites, it is comparatively healthy. The heart is free. The urine is also free from albumen, so that we put aside the kidney as a cause of the disease. The condition of the bowels, the diarrhœa, with occasional discharge of blood from piles, points to hepatic obstruction; so also the gradual wasting. The liver has been inflamed in the course of Glisson's capsule, although not in an acute form; nor on the peritoneal surface, otherwise pain would have been a more decided symptom. This effusion into Glisson's capsule extends to the acini of the liver, leads to partial contraction, to obstruction of the portal circulation, and consequent ascites. If there be pressure at the lobulus spigelii, there is interference with the return of blood through the inferior cava, and the legs then swell; the enlargement of the abdominal veins is to relieve the portal circulation of the blood of the hæmorrhoidal veins; with the hypogastric and epigastric, the blood current is in these vessels then reversed passing from below upwards, instead of fror above downwards. The bile ducts generally remain free, and there is no jaundice. If there were much contraction of the liver and thickening of the capsule, the edge of the liver would be rounded; here it is described as thin. A source of fallacy is cancerous disease affecting the substance of the liver or the liver with the peritoneum. If such had been the case there would be more pain from the affection of the peritoneum and greater cachexia.

In these cases the prognosis is unfavourable. At an early stage much may be done, and partial restoration may be affected if the patient will abstain from ardent spirits and from excess. Alteratives are of value, occasional doses of blue pill, or of perchloride of mercury. Diuretics, as the acetate of potash, or nitrate with broom, as in a case now in Philip Ward, or, as in this case, the copaiba resin. The inflammatory effusion may be lessened, but if the patient return to his former habits the contraction of the liver will increase, the ascites will return, diuretics will be of no avail, and the patient will gradually sink either from gradual exhaustion, the mucous membrane becoming red and irritable, or from coma, or from some attack of inflammatory disease, as broncho-pneumonia. Paracentesis may be performed in these cases, if diuretics do not avail, and is generally more safe in those cases in which the peritoneum has not been affected, as in this instance. If, however, diuretics act, they should always be tried first. In some instances tonics with gentle laxatives are the best remedies, as quinine with sulphate of magnesia.

(To be continued.)

We acknowledge with thanks the receipt of £1. 1s. each from Drs. Wilks & Savage, as their subscription to the Gazette.

Marriage.—September 20th, at the Wesleyan Chapel, City Road, London, by the Revs. Geo. Curnock and L. Waterhouse, fathers of the bride and bridegroom, Joseph B. Waterhouse, M.R.C.S., L.R.C.P., L.M., of Great Pealling, Lutterworth, Leicestershire, to Mary E. Curnock.

GUY'S HOSPITAL GAZETTE, *NOVEMBER*, 1876.

THE opening of the Session this year was robbed of its old attraction of the "Introductory," and at the usual hour of re-union the Colonnade and Quadrangle presented a scene which it was difficult to realise at the commencement of October. The Conservative element among us shook its head and bewailed the degeneracy of the times, while the exhuberant spirits who look forward to the opening day, as to an annual holiday on which they had a prescriptive authority to air their suppressed feelings, were utterly disconsolate. The time honoured institution had fallen on evil days into unmerited disrepute, and the wise saws and moral truisms which were the delight of our ancestors were no longer to be tolerated as pap for the rising generation. To make up for the omission, we were invited to a social gathering of a scientific, artistic, and sensational character, in which tea, coffee, and cake, replaced the mental pabulum we had been accustomed to in the good old times. Whether the change is a desirable one it is not for us to say, but to judge from the repeated expressions of approval that greeted us on all sides on the night of the Soirée we believe that the advocates of the older institution were in a decided minority. Prefatory addresses, however meritorious, must be necessarily repetitions of a well worn theme, and it is doubtful whether the home truths they seek to inculcate have a fair chance of leaving their mark amid the dust and din of their surroundings; on the other hand, the lecturer desirous of fulfilling well his thankless task is put to great disadvantage. He has to compete with others, probably his former teachers, who have trodden the same ground, and an honest sense of his own importance as much as a desire for originality prevents him from encroaching on the familiar track, and he finds refuge in matter altogether foreign to the objects of an inaugural address. Silent criticism is legitimate enough, but public commentary seasoned with symphonies of a sibilant and occasionally of a vocal character are not creditable accompaniments on an occasion fraught with solemn interest to many. While there we may be justified in casting a lingering regret over the memories of the past. We cannot fail to see that the abrogation of the ancient usage must be a positive relief to those entrusted with the delivery of the Introductory, and we may be pardoned for congratulating them on their happy deliverance from the disagreeble ordeal.

The success of the Conversazione was undoubted. It was not, as partly insinuated by a contemporary, a sober and sedate gathering were new students went helplessly about in search of friends, for on the contrary, it partook if anything too much of the family party, and by another year we hope to see the exclusiveness referred to so far remedied by the presence of a few more distinguished strangers. Some dissatisfaction was also expressed at the absence of ladies, and no doubt they would have greatly contributed to the attractions of the meeting, but however much we enjoyed its society, there is a growing feeling that the feminine element is sadly out of place in the Hospital on the 1st of October. What was wanting in feminine grace and distinguished notabilities was fully made up by the welcome given to old and young alike, and by the wonderful display of scientific and artistic works which had been brought together for their edification, The best microscope makers had come fortified with their newest and best instruments and most beautiful objects, and the electricians displayed numerous uses to which electricity could be applied, which were not even dreamt of a few years ago. Mr. APPS's exulive globe cascade and vacuum tube experiments were particularly admired, and Mr. SANDY, Electrician to the Hospital, illustrated practically the uses of a variety of interesting apparatus, none of which excited more interest than the miraculous electric pen invented by Mr. EDISON. Numerous objects of artistic and scientific interest were contributed by various members of the staff, as well as by students. We noticed particularly Dr. WILKS' unique collection of photographs of criminals and lunatics, illustrating the truths of physiognomy in their criminal and pathological aspects, and Dr. HICKS contributed from his storehouse of curiosities some superb specimens of Japanese lacquer ware, while a table was amply furnished with microscopes by several members of the staff to illustrate various

pathological conditions, selected specimens of which had been carefully preserved for the occasion. Among other novelties was an ingenious and delicate piece of mechanism called the sympalmograph, which professed to illustrate the harmonies of two notes on paper, exhibited and practically explained by Mr. VINEY; and a quaint red volume said to be the prayer-book in common use by the Cingalese, along with a sketch of a new aerial machine, were submitted by Mr. TOM BIRD. We can only say, with respect to the latter apparatus, that, if it does not succeed in making a highway through the air, it deserves a better fate than most of its predecessors. Nor ought we to omit to mention the type-writing machine exhibited by the Remington Sewing Machine Co., which drew an interested succession of visitors during the evening, who were influenced possibly as much by the attractions of the operator as by the marvellous performance of the instrumont. The prizes were distributed by the Treasurer at 10 o'Clock; but this ceremony, however well appointed, scarcely partook of its becoming dignity or importance in consequence of the confusion inseparable from a re-union of old frieuds in an apartment so constructed that one half of the audience were in ignorance of what was taking place in the other half. This, however, was a minor matter in connexion with what has proved to be a very successful friendly gathering, and we trust the session so happily inaugurated will prove a hopeful, as it must be a memorable, one in the annals of our *alma mater*.

Physical Society

Meeting October 7th, 1876,

DR. WILKS IN THE CHAIR.

The minutes having been read, the Chairman began by welcoming both old and new members, and expressing his opinion as to the value of the Physical Society, both as a part of the Medical School and as a nursery to the public career of future life: as a means of ventilating and discussing ideas formed on subjects read in the text-books and heard in the lectures, and a society for such an object is of special service in a science ever changing and advancing as is Medicine.

With regard to the papers to be read, Dr. WILKS congratulated the Society on the variety and choice of the subjects; and he impressed on the members the right estimation of the value of these papers, and gave several examples of papers read before this Society having been the first round of the ladder to after fame. "Not only did JENNER sit on these very same benches, but here it was that he first ventilated his brilliant idea of vaccination as a prophylactdic; and, it was owing," Dr. WILKS continued, "to a paper in the Hospital Reports, founded on one read before this Society on Bright's disease, that I obtained my appointment on the staff of Guy's Hospital.

He also drew attention to the honour of belonging to such a society—the oldest Society in London,—to the meetings of which in former days, "when wise men dwelt in the East," many men whose names are known and revered in the history of medicine were wont to come.

"The *oldest*," he went on to say, "for although the Medical Society of London claimed a part of the birthright, yet he maintained that ours was the elder of the twins."

"And not only is it an advantage from personal motives to belong to this Society, but it is your duty, the duty of every Guy's man to become such, and then to maintain both its honour and that of the school."

The Chairman then called upon Mr. R. A. BIRDWOOD to read his paper on Epilepsy, of which the following is an abstract.

Epilepsy is a general pathological condition of the cortex of the brain, and is manifested by the reproduction of a chain of symptoms, of which loss of consciousness is the essential one. In local surface disease consciousness is retained.

The convulsions in epilepsy are reflex. They occur on the application of a stimulus during the loss of central control.

A fright is sometimes succeeded by epilepsy, or a patient may fall down in an epileptic fit as the immediate result of a fright. Consanguinity of parents and brain disease in relations are predisposing causes. In the fits said to be due to peripheral excitation alone, a history of hereditary neurosis generally exists. Epilepsy is connected with vertigo, migraine and mania.

The epilepsy of syphilis is due to tumour and never to meningitis, and when epilepsy occurs for the first time in an adult over 30, previously in good health, it is due in 9 out of 10 cases to syphilis. Whatever may be the occasional states with which epilepsy is associated, it is essentially the same disease.

Diminished power of attention and of acquiring new ideas. and a tendency to form erroneous opinions have been observed in epileptics. Also atrophy of the ganglion cells.

The statement that highly intellectual persons are subject to fits cannot be credited. A fit may be followed by paralysis. There is a fall in the body temperature after a fit; in status the patient dies at a high temperature.

Mr. MACKERN thought that no better example of the difference of opinion among authorities could be found than epilepsy: one set of observers put the convulsions down to anæmia of the brain, others to congestion, while a third set assigned a discharge of nerveforce at high tension as the cause of the fits. Doubtless there was vasomotor disturbance, as evidenced by the pallor and subsequent congestion, but he could not believe that such a large proportion as 56 per cent. of cases of epilepsy occurred in healthy people, though they apparently remained quite well in the intervals between the fits; he believed with Dr. LIRCING that all this time the cerebral cells were storing up force which, when collected in sufficient quantity, would be discharged as a series of convul

sions on the application of an exciting cause; hence in epilepsy the nutrition of the ganglionic cells of the brain was interfered with, a far more serious condition than a mere temporary vasomotor disturbance. In regard to treatment he would add nitrate of amyl to Mr. BIRDWOOD'S simple nostrum, and could recommend its inhalation when the aura was felt.

Mr. UHTHOFF said epilepsy is considered by some to be due to congestion of the brain and spinal cord, by others to anæmia of those organs. The remedies for this disease support both theories; for nitrate of amyl produces dilatation of the arterioles and so congestion, but bromide of potassium produces anæmia by the contraction of the vessels. Belladonna is also useful in epilepsy; according to BROWN SIQUARD it produces contraction of the arterioles by its action on the muscular coat. Bromide of potassium on the other hand produces contraction by acting on the vasomotor nerves. Therefore, since there are some cases in which one or other of these remedies fail and others in which they succeed, might not epilepsy be due to an affection sometimes of the muscular coat of the arterioles, and sometimes of the vasomotor nerves, for the same symptoms would be produced in either case though the cause would be different.

Mr. DAVY thought that supposing, as was quite possible, that epilepsy was caused by the inhibitory action of the cells in the grey matter of the brain being interfered with, that this interference was caused by their inability to become oxidized. This might be caused not only by a deficiency of oxygen, as in anæmia, but by other causes, such as congestion, which interfered with their chemical action. Thus not only the action of bromide of potassium, but also of nitrate of amyl in stopping the fits, would be accounted for. On this hypothesis also one could easily see why at the first the patient's intellect was not affected, whereas after a time from repeated want of oxidization, the cells atrophied and the patient became imbecile.

Mr. LARKIN thought that theory was one thing and practice another. Here, at the Hospital, we were studying the former, but in practice we should find that our personal experience was more reliable for diagnostic purposes. He considered that an epileptic patient presents two special diagnostic features:—

1.—Dull and heavy countenance.

2.—Thickness of speech.

He had seen both anæmic and plethoric patients the subject of epilepsy, but the treatment should be different in such cases:—thus, he had once employed venesection on a plethoric subject for epilepsy with good result, when bromide had been tried without avail. Or epilepsy might be complicated with syphilis or heart disease, in which cases the bromide should be combined with the iodide of potassium and digitalis respectively, or the disease might be hereditary, when some other drug must be chosen.

Mr. LANE showed the gradual gradation between grand malvertigo and mental abstraction. Loss of consciousness and convulsions need not both co-exist. He thought loss of consciousness to be due to a temporary anæmia, as in sleep, which destroys inhibitory action but does not affect reflex action. Should there be a central or peripheral irritation, as tumour, &c., or irritation, subjectively or objectively inappreciable (as shown by aura in some cases), acting upon a nervous system devoid of inhibitory action you get a series of violent reflex symptoms, which cease when the blood has become so disoxygenised as to produce a state of asphyxia.

Mr. REYNOLDS said it is sometimes difficult to diagnose an epileptic attack. When it is feigned it can often be distinguished by the absence of the deadly pallor that comes over the face of an epileptic, also the spasm is generally on both sides of the face instead of only one, as in the true cases. Epileptics generally fall on their faces, whereas impostors take care not to do so. He also asked whether the bad effects of consanguinity of marriage on the propagation of the species was found in epilepsy.

Mr. L. M. B. JONES quite agreed in considering Mr. BIRDWOOD'S paper to be practical as well as most instructive. With regard to peculiar actions exhibited by epileptics, he had seen a case in which a man subject to epilepsy had excised both his testicles with his pocket-knife, in consequence of which the patient had lost an enormous quantity of blood. Mr. LARKIN mentioned venesection as a method of treatment. In this case losing blood certainly did no good, as the patient became quite insane in the course of a few days and had to be removed to an asylum. He mentioned the case of a young girl suffering from slight though very frequent fits, who was, at all events, temporarily cured by 5 grain doses of chloral hydrate three times a day, after bromide of potassium and various other remedies had failed in doing the slightest good. With regard to the treatment by nitrate of amyl, he had heard a good deal of its beneficial results, but had had only one opportunity of seeing it administered himself, when it appeared to do more harm than good, as the patient, who had already become quiet, immediately became convulsed again on its being applied to his nostrils.

Mr. MEEK said, Mr. BIRDWOOD tells us that an epileptic fit is due to anæmia of the brain. Now, the movements of the muscles are the result of messages sent down from the ganglion cells of the brain through the nerves to the muscles to tell them to contract. These ganglion cells must have nourishment or else they will cease to act as soon as their own store is used up. It seems to me, therefore, that this anæmia is a conservative action on the part of nature. The central cells become exhausted, and so the irritation of the nerves, and consequently of muscles, ceases, and the convulsions end.

Mr. LOWDELL said that epilepsy was sometimes caused by irritation of the peripheral ends of the nerves, and quoted a case where it was due to carious teeth, the extraction of which proved a cure, and the apparent benefit in warding off the fits derived from Pot. bromid. might be due to its action on the nervous system rather than on the vascular.

Mr. MORRISON concurred in Mr. SHAW'S opinion that epilepsy was frequently occasioned by such continuous pressures upon the brain as bony growths would produce, and quoted the case of two brothers he had seen in convulsions brought on by dropsy following scarlet fever; in one case the fits ceased with the subsidence of the dropsy, but the other patient had been subject to epileptic seizures ever since,—a period of five years.

Mr. BIRDWOOD having replied, and a vote of thanks having been passed to him, the Meeting adjourned until October 21st, upon which day Mr. P. HORROCKS will read a paper on "Hysteria."

The second Meeting of the Physical Society took place on Saturday, October 21st, when Mr. HORROCKS read a paper on Hysteria, of which the following is an abstract:—

Though the term Hysteria implies that it is an affection to which women alone are liable, and so it is etymologically absurd to apply it to men, yet the same objection would apply to many diseases. He remarked that with the public Hysteria means shamming, and so advocated the use of Neuromimesis or Neurosis when speaking to or before a patient. He shewed how important Hysteria was because of its frequency. He defined it as a peculiar affection of the nervous system characterised by a perversion of the will. After describing the "fit" comparing the paroxysmal and non-paroxysmal forms with the haut mal and petit mal of epilepsy respectively, he went on to speak of other diseases which might be simulated by Hysteria, both medical and surgical. He also included under the term Hysteria, the nervous affection so frequent, especially amongst medical students, whereby they become convinced that they are themselves the subjects of disease, though they may be perfectly healthy, or perhaps suffering from some dyspepsia. Speaking of the Etiology, he said it

could be excited by the most varied causes, uterine or otherwise. In the treatment of the disease, he recommended that the patient's perverted will should be mastered by a will more powerful than her own.

Mr. BIRDWOOD opened the debate by drawing the attention of the members to the fact that Clinical Ward now afforded a capital opportunity for the study of hysteria and for the efficacy of its treatment by galvanism. He did not think Mr. HORROCKS laid enough stress on the value of the interrupted current in these cases. With regard to a patient whom Mr. HORROCKS had quoted as a typical case of hysteria, he felt bound to disagree with him, as he himself was of opinion that it ought to be looked upon as a case of local disease produced by prolonged loss of function. He found the paper a difficult one to oppose as it had fairly well exhausted the subject. He was of opinion that hysteria should be treated with a strong hand, and that dyspepsia and gastric disturbances were a common cause.

Mr. SHAW remarked that Mr. HORROCKS had principally dealt with those medical diseases stimulated by hysteria, to the exclusion of the equally important surgical affections. He maintained, in the case of hysterical joints, that a right diagnosis could be arrived at by catching the patient asleep, when the general position would be such as to prove the impossibility of genuine joint disease, and quoted a case in point. Personally he thought that you should show your patient that you had great faith in the drugs you prescribed, and then make your mixture as nasty as possible. He then related the common occurrence of substituting cold water for the subcutaneous injection of morphia solution, as a proof of its value in eliciting deceit with regard to pain.

Mr. BURT asked Mr. HORROCKS if all hysterical patients were always in a state of anæsthesia, as in his paper he had not mentioned the hyperanæsthesia that often exists.

Mr. HARTLEY divided the subject into two great classes, viz.,—true hysteria and quassi-hysteria; the latter of which corresponded to true hypochondriasis. He disagreed with Mr. HORROCKS, and thought that ungratified sexual appetite was a chief exciting cause of the disease. He also thought the substitution of water for the morphia solution answered as well in many other patients who had not the slighest taint of hysteria.

Mr. UHTHOFF said that the disease, for so it ought to be called, was interesting from its frequency. He cautioned the members to be on their guard against classifying diseases of which we knew nothing with hysteria. Epilepsy was in many respects very like hysteria. A parallel was then drawn between the two and distinctive features of each pointed out, which he illustrated by quoting a case in point. Mr. HORROCKS had disappointed him in not showing, as he had promised in the early part of his paper, that hysteria was more common than was suspected in men.

Mr. SCOTT observed that the previous speakers had confined their attention to the treatment of hysteria in hospital practice His ambition was to be a general practitioner, and he felt sure that in private practice the interrupted current could not be satisfactorily used in the treatment of these cases. In support of the practice he should adopt, he quoted the opinion of an old physician. He thought Mr. HORROCKS was mistaken in advising that the patient should not be told what was the matter with her. He certainly was of opinion that the patient and her friends should both know the true state of affairs, and laid stress on the benefit of exercising strong moral influence over the patient. He thought that the religious tendencies of the present age, with its confessional and self-absorbing books, recommended by those in authority, tended to excite complete self-concentration, and thus led to hysterical conditions. He did not wish to deprecate religion in any way, but for such cases he recommended one of a practical sort as tending to absorb less of self.

Mr. DAVY thought that the last speaker had hit the right nail on the head. He was sure that abundant proof could be found to prove that slight hysteria was prevalent and widely diffused amongst a class of persons whose whole existence was concentrated on self. Their brains were semi-paralysed; headache was a common symptom; and their uterine functions were disordered. These cases had two terminations:—the first being that the girls got married or took to some sensible occupation, and so got well; and the second being that they continued their self-concentration, and became cases of true hysteria. He then spoke strongly against the drug treatment, characterising it as not only ridiculous but also dishonest. In support of this assertion he quoted the well-known case of Miss Martineau. He advised change of scene, foreign travel, and moral influences.

Mr. GROSS did not agree that there was an increase of strength during the hysterical paroxysm, and thought it was entirely a delusion. He quoted a case in point, and advised that during the fit the patients should be watched and prevented from hurting themselves,—a rare occurrence. He failed to see how imagining one has a disease, and finding such was a mistake, could be called a case of hysteria. He disagreed with Mr. SHAW as to being able to diagnose a hysterical joint during sleep, for it was a well-known fact that, in the case of hysterical knee-joint, it could not be flexed during sleep. Treating hysteria in hospital and private practice were two very different things. He advocated the use of assafœtida, valerian, and similar drugs, and had seen them used to great advantage; hence he could not agree with the last speaker that it was dishonest to do so. He cautioned the members against allowing hysteria to be a cloak for ignorance, and was of opinion that it ought not to be confounded with malingering. He quoted a case of hysteria cured suddenly by instantaneous emotion, but it only lasted for a time, the patient relapsing again into her former condition.

Mr. LEE said that cases on the borderland between epilepsy and hysteria were our real difficulty. He quoted a case in Clinical in which there was a combination of the two. He thought that the parallel in man of hysteria was hypochondriasis.

Mr. LOWDELL observed that there were two sets of nerves connected with the mind, viz.:—those conveying impressions, and those controlling them. In hysteria, he said, the latter were perverted, and so suggested the use of nerve tonics on a scientific basis. He could not agree with Mr. BIRDWOOD that hysteria ever proceeded from stomach derangements. He then quoted a case in reference to the duration of hysterical fits, and was of opinion that the essayist might have said something in reference to so interesting an element.

Mr. GEORGE MACKERN remarked that in cases of hysteria, as in other diseases, we ought to think of the cause and give drugs scientifically. He thought Mr. DAVY had gone too far in styling the practice as dishonest. Would he be good enough to say in what diseases medicines were given honestly? In hysteria there was a tendency to idealize subjective sensations, and therefore it was very different from brain disease, where objective sensations chiefly come into play. Hysteria being a disease of a subjective character, what drugs can you give? Out of the 980 or so preparations of the British Pharmacopœia, the speaker knew of none which acted on the subjective system. Still, in spite of that, he could not agree with Mr. DAVY. As the customary valerian and assafœtida do good, we ought to give them empirically. He thought Mr. LOWDELL'S opinion of the causation of hysteria a bold one, and characterized it as an assertion without proof to support it.

Mr. DAVY owned that he had used a little too strong language in regard to the treatment by drugs, but he thought he had fully qualified that statement. In reply to Mr. MACKERN, he would merely name the exhibition of digitalis in mitral disease.

Mr. HORROCKS having replied, and a vote of thanks to him having been proposed, seconded and carried by acclamation, the Meeting terminated.

Mental Diseases.

By Dr. G. H. SAVAGE, OF BETHLEM HOSPITAL.

NOTES ON LECTURE V.

MELANCHOLIA.

This form of mental disease is no more sharply defined than is mania; we have in both borderlands, hypochondriasis being related to melancholy much as hysteria is to mania.

By melancholia we mean a state of mental depression associated with bodily illness that is not in proper relation to any outside cause of grief. The death of a loved friend may produce deep and lasting sorrow and be natural, but if this state passes into a boasting of life and with delusions that the death was due to you this would be melancholia.

Melancholia is not always due to trouble or worry, but prolonged misery may produce it in a predisposed subject; causes of physical weakness are common causes of this state, prolonged lactation or a fever may leave mental depression. Some patients not only have a bias to mental disease but I have seen several members of a family suffer in turns from similar attacks of melancholy. If a patient inherit a tendency to neurosis and also have some chronic visceral disease mental depression is common. In heart disease I have several times met with melancholy; in one patient whose mother was insane melancholia developed itself associated with aortic disease, and the patient died of heart disease and exhaustion.

Melancholy is often only a stage of the mental disease that will be followed by acute mania. This is called the "stadium melancholicum" and is said by some always to precede mania. This stage may be very trifling in degree and duration or may be profound and prolonged.

In classifying the forms of melancholy we shall notice that they may be classed as to their duration or as to their external symptoms. Melancholia is related doubly to delusions. In some cases the melancholy is without delusions at first, then delusions being reasoned up to as it were, thus a patient who has no grounds for sorrow feels unhappy and unnatural, and gradually, having no objective cause for such woe, thinks she has been forsaken by God and is given over to the Devil. On the other hand, patients may first develop delusions or be worried by hallucinations and then become depressed because voices tell them they are damned or because they think they have sinned against the Holy Ghost. It is not necessary to have delusions in melancholy, and some cases are so actively noisy that at first sight one might case them maniacal; thus a patient who believes men are going to roast her alive may become dangerous and break up the furniture, yet she is suffering from depressing delusions.

As the borderland class we have Hypochondriasis.

As the first mode of dividing.

1. Acute Melancholia.
2. Chronic „
3. Recurrent „

As the second mode of dividing.

1. Simple Melancholia.
2. Active „
3. Stupid „
4. Melancholia with delusions may include either of the above.

All these classes overlap but have fairly distinct characteristics as will be seen when we come to give examples.

Hypochondriasis is seen in general practice as often as in Asylums, but we constantly meet extreme cases that are obliged to be secluded. This state may persist or may more rarely pass into some other form of mental disease. The emotional depression proceeds from a strong bodily feeling of illness; this feeling may be general or particular. We see the hypochondriacally insane in both men and women but, as in ordinary hypochondriasis, mostly in men. Often insane trains of reasoning grow out of the morbid sensations. A patient imagines his bowels are sealed and wants to rip up his belly to get relief, another says he feels his blood circulating and thinks this is due to syphilis. The insane hypochondriac is wholly occupied in his changing sensations and explaining them or seeking medical aid. Any part of the body may be the centre of the diseased sensation, I think the digestive tract in men and the generative organs in women are the most common seats. With all the suffering the mind may remain sound in many respects, memory and the association of ideas may be perfect but volition becomes blunted; the whole body suffers and the patient looks worn and thin. Severe cases of hypochondriasis rarely occur in young people and rarely recover; they may remit.

In treating such cases general measures relieve, aperient bitter water or aloetic purges combined with quinine do good, cold and shower baths with compulsory out-door exercise are useful. In some cases stimulants and mineral tonics assist in the cure; if not cured such cases are generally short lived.

We next proceed to examine into the conditions of melancholia, as a whole, looking at the symptoms that are general in all forms. The state often follows immediately on small causes the mere change of scene or of residence that has been ordered to improve the general health really precipitating the attack, a vague feeling of malaise, restlessness, and a feeling of being unlike one's old self comes on, and some cases at this period take to objectless wandering. Sleep is disturbed and unrefreshing, appetite capricious, bowels confined and general appearance sallow. At this period the patient may perceive things as they are, but argue from their not producing the same feeling or emotions in himself, that they are changed. He may feel that the change is in himself and then avoids his friends. Gradually from feeling changed he feels unable to control his thoughts; they ever return to the morbid ideas and then often he fancies that he is "influenced" or "mesmerised."

There are often feelings of distress or pain in the head or at the epigastrium. Thinking in some cases seems to be felt, and recently I saw a young man who said he could feel his thoughts pass from his brain to his tongue; he also complained of explosive noises. Melancholy patients gradually become absorbed wholly in their morbid thoughts as the hypochondriac was in his morbid feeling. The melancholy are never emmyés.

Though possessing powers of reasoning about other patients they cannot be reasoned out of their own false ideas. As a rule the simple state of unhappiness passes into one or other of the varieties and these varieties depend much on the temperament and education of the patient. I always look for our most religiously depressed cases in scripture readers and the less cultured religious teachers; they spend their lives in dogmatic teaching and yet feel that their own lives are not up to their preaching; they are aiming at the unattainable.

In melancholia you may meet cases with hyperæsthesia, but as a rule common sensibility is lessened, either really or from concentration of thought on other parts. In most cases of this state the movements are slow and monotonous, even in cases of active melancholy the movements are monotonous. In many cases we meet with hallucinations of the hearing and sight, threats are heard or voices accusing them of crime or warning them of death. Visions of terror occur and most offensive smells and tastes. It is strange how often the smell of sulphur is complained of, whether this is due to old association of misery and sulphur in the future state or to some odd local condition of the olfactory organs I cannot say. In speaking of the limited movements in melancholia I should mention that we see many cases that would be considered cataleptic out of an asylum; as a rule these are hopeless wrecks.

The three most prominent symptoms as the disease pro-

gresses are sleeplessness, refusal to take food and suicidal tendency. In melancholia patients will exist for months without any complete sleep; they will endure longer than maniacs because they often lie quietly and get the "nourishment of bed." Enforced sleep will not cure. Some sleep fairly but have no refreshment from the sleep. Refusal to take food may arise from delusions as that the throat is shut, or because they think they are too wicked to live, or because voices order them to refrain, or to produce death. Suicidal cases are common, they may be always on the watch for a chance or may simply be impulsive, and in this latter condition are never trustworthy. Patients will learn to feign health and deny their delusions to get a chance of suicide. Patients generally have one favorite way of attempting suicide and will only make use of this; I have known a man pass many chances of killing himself but waited till he got a second chance of shooting himself.

Melancholic patients get well slowly and generally after a longer illness than in mania. If the patient be young or middle aged and the attack has not been of long standing the chances are in favor of recovery, provided there be no secondary disease, such as Phthisis. Melancholies following well-known causes of exhaustion generally recover. I look upon melancholia as one of the marked diseases of serial decay; such cases are bad. If due to delusions and occurring at the climacteric they are unfavorable. In some cases, and I think generally the younger ones, the melancholy may be followed by slight excitement or there may be several relapses of slighter character before ultimate cure. In some cases there is sudden cure; such cases I am inclined to look upon as allied to hysteria Recovery may be complete or partial, in the latter the mental affection leaves a mental weakness or a change of character. Instead of recovery melancholy may become chronic, and this leads me to consider the other varieties as ruled by time. An acute attack averages 6-8 months before recovery, if still melancholy and unchanged in from 1-2 years it will probably be a chronic case. A third class that helps to load all asylums is that of cases that have attacks recurring at irregular intervals; such cases often keep well in asylums for long periods but changes to see friends produce recurrences.

Besides chronic melancholia, dementia or mental weakness in one form or another is a common result of prolonged depression, there is sometimes a sudden outburst of mania before the mental extinction. Not a few cases of melancholy die, some from exhaustion, some from starvation, suicide or lung disease. I can give no rules worth following for curing this disease apart from cases and so shall defer the treatment to my next lecture.

Before concluding, I will refer to the other forms of the disease. By simple melancholia I mean a state of mental and bodily depression of a regular course without delusions, a state of cloudiness rather than storm.

Active melancholia resembles mania from the noise and violence of the patients, but the versatility of mania is absent and the ideas follow a monotonous course. As a rule the noise and violence can be traced to appropriate delusions. Melancholy with stupor resembles dementia in appearance but the cases resist if interfered with, are often sleepless and refuse food and retain their memories.

In my next I shall give typical cases.

REPORT OF A CASE OF PLEURO-PNEUMONIA UNDER THE CARE OF Dr. MOXON.

Caroline E. æt. 57. Admitted July, 15th. Died July, 18th.

Patient had no previous illness but had never been a strong woman, and lately her health had been failing, and she had complained much of weakness.

A fortnight before admission she had been living in a house where a relation of hers was lying ill of typhoid fever which proved fatal on July 9th.

The drains of the house had previously been out of order for some time.

On July 13th Patient was taken ill; she complained of great weakness and burning heat, she vomited and diarrhœa came on; perspiration was not excessive. She has taken no solid food since the 12th, but has lived upon beef-tea iced water and brandy.

On the 14th patient was rather better and her skin was not so hot, but diarrhœa continued till admission.

On the 15th the Patient was admitted. She was a very thin feeble looking woman, with a flushed and anxious face, bright eyes, burning hot skin and moderate perspiration. The abdomen was flaccid, fairly full, slightly tender in the left lumbar region. The tongue was moist covered with brown fur, except at the margins which were clear, it was not tremulous. She passed a watery, brown, nearly clear motion with very little solid matter in it. Soon after her admission, her motions having hitherto, by her own account, been liquid and dark-coloured. There was slight gurgling in the right iliac fossa, but it was not well marked. The liver was not enlarged, the splenic dulness appeared to be rather increased. There was slight crepitation at the bases of the lungs behind, but no dulness.

Temperature on admission (12 noon), 102·4°; pulse, 128; respiration, 44. In the evening, temperature, 104·6°; pulse, 134; and at 10·50, temperature, 103·2°. Patient took Ammonia Carb. Serpatory Aulk, beef-tea and ℥ iv. of wine.

On the following day there was diarrhœa, the motions being liquid and light-yellowish brown in colour, not quite the colour ascribed to typhoid, there was no blood. In the evening the patient was delirious and complained much of pain chiefly in the right axillary region. She did not sleep at all that night. Morning temperature, 102·6°; evening, 103°; pulse, 124 and 120; respiration, 40 and 38.

The next morning the tongue was dry and brown, brown sordes on the lips, there was excessive thirst and great feebleness. The abdomen was full, slightly tender in the epigastric region, no spots upon it or chest. There was considerable dyspnœa, a pinched and anxious face, great distress and mourning.

There was dulness, slight crepitation and deficiency of breath and voice sound over the right base. Dr. Moxon diagnosed Pleuro-Pneumonia of right base.

On the 18th the patient was evidently much worse. She had not slept at all the pervious night and had been delirous, her face was livid and congealed, her feet and hands cold, her tongue dry and covered with brown fur, her lips covered with sordes and she complained much of thirst. She had taken ℥ vi. of brandy since the afternoon of the day before. The conditions of the right side of the chest were not materially altered and there was crepitation at the left base. She died quietly about 11·30. Temperature 1 hour before death, 100°; pulse, 120; respiration, 60 .One hour after death temperature was 97·4.

P.M.—Complete consolidation of the whole of the lower lobe of the right lung the central part of the affected lobe was in a condition of grey hepatization, the margins is that of red hepatization and there were patches of lung tissue into which blood had been effused and which had sotfened scattered through the hepatized lung. The two upper lobes of the right lung and the whole of the top lung were crepitating, the middle lobe of the right lung being more closely united with the lower lobe than usual, but there was no lymph effused between their adjacent surfaces.

There was about ℥ i. (one ounce) of clear serous fluid in the right pleural cavity and a considerable quantity of recent lymph at the base posterior part and apex of the right lung. The left pleural was healthy.

The kidneys had adherent capsules and rather granular contracted cortex, there had been no albumen in her urine.

The stomach was healthy, the intestines throughout were in a granular catarrhal condition and at the lower part of

the jejunum there were patches of slight ulceration and excoriation. Some (a few) of Pyer's patches were visible, but they were not enlarged and appeared healthy. Vermiform appendix contracted but free from ulceration. The spleen weighed 3½oz. Heart 7oz.

The interest of the case appears to be chiefly in the fact that the patient came from a house where typhoid existed and that she had diarrhœa throughout her illness, also that the Pneumonic signs did not definitely come on till after her admission, hence at first there was some doubt about the diarrhœa, and indeed the case was sent in as one of Typhoid.

G. A. W.

THE CONVERSAZIONE.

That the Conversazione held on the opening day was most successful, all who were present will be as ready to acknowledge as we are pleased to record; and will, we feel assured, heartily join us in thanking those who kindly lent their aid as exhibitors, and congratulating all concerned in carrying out the arrangements. The transformation of Astley Cooper Ward into so complete an exhibition was beyond all praise, and by detailing, as far as our limited space will permit, a few of the many articles of interest our absent friends will easily perceive that we are not bestowing undue laurels.

In decorations the fine arts were well represented. On entering the door the Statuary, Bronzes, Lamps, &c., contributed by Mr. H. McCarthy and Messrs. Gardiner & Co., produced a fine effect, while the walls and benches were plentifully stocked with the valuable Paintings, Etchings and Photographs lent by Dr. Evershed, Mr. John Fisher, the Berlin Photograph Co., the Submarine Telegraph Co., and others. The specimens of Tapestry by Mr. Pitman adding much to the general harmony.

The scientific collection was by no means confined to articles of special interest to the medical profession. The Electric Telegraph was in full operation, its progress from the original "Double Needle" instrument down to the "Morse Printer" and "American Sound" instrument, now in almost universal use was illustrated by Mr. J. H. Sandy and a staff of Telegraphists. A collection of Submarine Telegraph Cables, including the first laid across the English Channel and embracing the most modern, were lent by the Submarine and West India and Panama Telegraph Companies.

Messrs. Garnham and Co.'s, improvement in Block Telegraphs for single lines of Railway was illustrated by the inventor, Mr. R. R. Harper; a paper upon the subject was read at a recent meeting of the British Association when it was shown that two trains could not possibly come into collission if the men at the signal stations and the drivers of the trains strictly carried out the system.

Messrs. Stroudley and Rushbridge's apparatus for communicating between passenger and guard, as used on the Brighton line, was exhibited by Mr. Stroudley; in addition to which both a Stationary and Locomotive Engine was kept at work by electricity; the former lent by Messrs. J. How & Co., and the latter, traversing a circular table, was lent by Mr. Thorpe of the Electric Carbon Company, who also exhibited a fine collection of Carbon Plates, Blocks and Points for Batteries and producing the Electric light. We must not omit to mention the "Edison Electric Pen," or the "Remington Type Writer," both of which attracted much attention; from a letter written by the former almost an indefinate number of copies can be quickly taken, while the latter prints in bold type one or several copies of its work at the same time.

Mr. Higgins occupied a temporary dark room with the Demonstrating Opthalmoscope; Dr. Galabin also lent his personal aid in illustrating the Sphygmograph, and Dr. F. Taylor, Dr. Goodhard, Mr. Golding-Bird and Mr. F. Durham furnished a most interesting collection of Microscopical Specimens illustrative of various Pathological conditions; the Microscopes were exceedingly numerous and varied and were shown by Messrs. J. and R. Beck, Mr. Pillisher, Mr. J. Apps, Mr. J. Swift, Mr. W. Stanley, Mr. Le Pelley, and many others.

Mr. Viney's Sympalmograph for representing on paper the harmonies of two notes excited considerable attention, as did also the collection of beautiful Vacuum Tubes exhibited by Mr. J. Apps.

The Surgical Instruments were numerous, Messrs. Millikin, Weiss, and Krohne and Seaseman having a good collection. Paquclin's Thero Cautery was of especial interest. The instrument itself consists of a Thimble or Cone of Platinum mounted on a hollow handle to which is attached an apparatus for producing a spray of Spirit of Benzoline; the Platinum being first heated over a spirit lamp the spray apparatus is set to work, when combustion of the spirit spray takes place and the Instrument can be kept at any desired heat.

Mr. Apps exhibited a constant current Battery for Medical purposes, Mr. Sandy exhibited Dr. Allison's new Faradic apparatus, also constant in its action and extremely portable, the Battery being hermatically sealed prevents any acids or other destructive compound being spilled. Mr. Golding-Bird's new Electric Caustic, as used in the treatment of Scrofulous glands, was also shewn by Mr. Sandy. The action of this arrangement depends upon the development of Chloride of Zinc in the tissues, but acting in the nascent state it is quite painless. The zinc is thrust into the part to be destroyed, while the silver is placed upon any raw surface near.

CASE OF UNILATERAL KIDNEY.

In the last number of the *Gazette* is an abstract from the *Medical Record* describing three cases of unilateral kidney in the male. A similar abnormality in the female which came under my notice in July last may be worth noting. H. B., æt. 37, was committed to prison at the end of June, and was sent to the hospital on July 1st suffering from acute disease of the chest. She died on the 12th. At the post-mortem there was found as the cause of death tubercular disease of both pleura and acute pneumonia of left lung. There was no trace of any kidney on the right side, that on the left was very bulky, large, and weighed 11 ounces. On section: structure, coarse, but all parts augmented proportionately in size. The ureter on this side was traced down to the bladder and found to be considerably larger than normal along its whole course. The opening of the right ureter into the bladder was easily found and the duct followed up, at first scarcely if at all smaller than usual, but gradually contracting until about the middle of the psoas muscle it ceased to be patent and ended in a fibrous cord, which became lost in the areolar tissue. Uterus and ovaries healthy and normal.

HENRY CLARKE.

WAKEFIELD PRISON.

Football Club.

The Annual Meeting of the Football Club was held on Wednesday, October 4th. Mr. P. F. Gilbert was elected Captain in the place of Mr. W. G. Gray.

At a Committee meeting held the same day, caps were awarded to Mr. H. Welchman and Mr. J. C. Keer.

T. A. IVES HOWELL,
Hon. Sec. G. H. F. C.

GUY'S HOSPITAL *v.* HARLEQUINS.

This match was played at Stamford Brook, on Saturday, October 14th, and resulted in a victory for the Harlequins by two goals to one touch-down.

The ball was kicked off by Gilbert, and after a few minutes play Sharpe dropped a goal for the Harlequins. Very soon

fter this Perham obtained a try, which was converted into a oal by Sharpe. After these reverses the Guy's forwards, laying well together, kept the ball near the Harlequins' oal line. Just before half time, Welchman made a good rop at goal, the ball just falling short of the cross bar, directly fterwards the Harlequins had to touch down in self defence. fter half-time the play on both sides was very even, Guy's aving slightly the best in the forward play while the Harlequins had the advantage in back play.

For the Harlequin Team, Duff, Fraser, Bassano, and Collett layed well—while for Guys, Gilbert, Welchman, Shepherd nd Howell were most conspicuous.

The following played for Guy's :—

N. E. Morse, Q. Veitch, backs; J. Shepherd, three quarter back; H. Welchman and F. Jackson, half-backs; P. F. Gilbert (Capt.) T. A. I. Howell, F. Wilkinson, J. Reader, J. Rees, J. Mansell, F. Lister, H. Liddell, C. Green, D. D. Roberts.

HOSPITAL HYGIENE.—Some elaborate alterations, in connection with the drainage, are being carried out on the east side of the old Hospital with the view of improving the Sanitary arrangements, both inside and outside, of the wards. The principle adapted is that known as BANNER'S patent, which, if it proves as successful in practice as it does in theory, is likely to find favour in most Public Institutions as well as in private houses. We hope to be able to report more fully on this subject in a future number.

SAVORY & MOORE'S

(PATENT)

MEDICATED GELATINE PREPARATIONS,

COMPRISING THE

ROUND DISCS FOR OPHTHALMIC PURPOSES.

Which were originally introduced by this firm, and have now been in general use by the Profession in this country and abroad for nearly twenty years.

"Much smaller doses of medicaments such as Atropine, Eserine (Physostigmine), Sulphate of Zinc, Morphia, &c., suffice to produce a marked effect by this form of application than when drops are introduced."—*The Lancet.*

"The transparent Discs dissolve admirably in contact with the moistened conjunctivæ. Nothing can be imagined more practical."—ANNALE D'OCULISTIQUE (Belgium, June 30th, 1864).

These (*Round*) Discs are contained and supplied in small tubes and cases, holding nearly 100 Discs each, and have been pronounced by all the Members of the Profession who have employed them to be the best media for Ophthalmic applications, as the *corners* of the square preparations used for this purpose are apt to irritate the Eye of the patient.

NEW DISCS FOR HYPODERMIC INJECTION.

Prepared by SAVORY and MOORE, at the suggestion of Dr. A. ERNEST SANSOM—viz.,
Morphia, Atrophiæ Sulph., Strychnia, Apomorphia, Ergotine, Codeia, Caffeine, &c., &c.

These Discs may be carried in the smallest-sized pocket-book, are soluble in a few drops of warm water and offer a *certain* and *immediate* means of securing hypodermic injections.

Their advantages over the ordinary solutions, are portability, accuracy of dosage, and prevention of waste, as they will keep good for any time; whilst in a few seconds they form a reliable injection, the whole series used in Hypodermic treatment occupying no appreciable space.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

JOHN B. MEDLAND,

MICROSCOPE & SCIENTIFIC INSTRUMENT MAKER.

MEDLAND'S STUDENTS' MICROSCOPE, COMPLETE £3.

An excellent Working Instrument.

EVERY DESCRIPTION OF APPARATUS FOR MICROSCOPICAL PURPOSES, MOUNTING FLUIDS, GLASS SLIPS, CELLS, THIN GLASS COVERS, &c., &c.

CLINICAL THERMOMETERS from 7/6. URINOMETERS from 3/6.

Photographs of Guy's Hospital, Portraits of Guy's Medical Staff, Eminent Medical Men, &c., &c.

10a, BOROUGH, LONDON BRIDGE

(CLOSE TO THE RAILWAY ARCH).

NOW READY, SECOND EDITION, CROWN 8vo, 9s.

REST AND PAIN:

A COURSE OF LECTURES

On the influence of Mechanical and Physiological Rest in the Treatment of Accidents and Surgical Diseases, and the Diagnostic Value of Pain.

By JOHN HILTON, F.R.S., F.R.C.S.

EDITED BY

W. H. A. JACOBSON, F.R.C.S., Assistant-Surgeon to Guy's Hospital.

London: GEORGE BELL & SONS, York Street, Covent Garden.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society by W. DREWETT, 43, Borough High Street, London, S.E.

Guy's Hospital Gazette.

A Students' Journal of Hospital News, Medicine and Surgery.

NEW SERIES.—No. 12. DECEMBER, 1876. SIXPENCE.

CONTENTS.

Clinical Lecture on Enlargement of the Liver 135

Clinical Lecture on Hip Joint Disease 137

Mental Diseases... 137

Junior Guyite Club 139

Notes of the Month 139

Leading Article... 140

Physical Society 141

Reflections of a Fœtus 143

University of London 144

Correspondence... 146

Football Club 146

Arctic Expedition 146

3d. IN THE 1s. OFF MEDICAL BOOKS.

H. H. G. GRATTAN,

12, THE BOROUGH, LONDON BRIDGE.

Books Bought or taken in Exchange. A number of cheap Anatomical Plates for Sale.

SESSION 1876 & 1877.

*** *Gentlemen Students of Guy's are respectfully requested before purchasing at any other House to send or call for "Grattan's New List."*

Druitt's Surgeon's Vade-Mecum	(12/6)	9/6
Garrod's Materia Medica and Therapeutics	(12/6)	9/6
Gray's Anatomy, Descriptive and Surgical	(28/-)	21/-
Heath's Practical Anatomy and Dissector...	(12/6)	9/6
Hooper's Physician's Vade Mecum	(12/6)	9/6
Huxley's Classification of Animals	(6/-)	4/6
Kirke's Handbook of Physiology	(12/6)	9/6
Roscoe's Elementary Chemistry	(4/6)	3/6
Wagstaffe's Guide to Human Osteology ...	(10/6)	8/-
Ward's Human Osteology	(7/-)	5/3

&c., &c., &c.

Students Note and Case Books in great variety.

THE IMPERIAL AUSTRIAN FRANCIS JOSEPH ORDER OF THE GOLDEN CROSS, WITH THE CROWN OF MERIT, 1873.
INTERNATIONAL EXHIBITION PRIZE MEDALS, 1851, 1855, 1862 AND 1873, FOR EXCELLENCE AND CHEAPNESS.

M. PILLISCHER,

Optician and Manufacturer of

ACHROMATIC MICROSCOPES,

And all kinds of Scientific Instruments.

PILLISCHER'S ST. THOMAS'S HOSPITAL MICROSCOPE,
As supplied to the principal Universities and Hospitals. Monocular, £5. Binocular, £10 10s.
TRANSPARENT INJECTED ANATOMICAL PREPARATIONS, Expressly prepared for M. PILLISCHER, from 1s. 6d. each.
MICROSCOPIC DISSECTING INSTRUMENTS, MOUNTING MATERIALS, at specially low prices to Students.
PILLISCHER'S NEW REFRACTING OPTHALMOSCOPES, after DE WECKER.
OPTHALMOSCOPES, LARYNGOSCOPES, POCKET CASES, in great variety at moderate prices.
PILLISCHER'S NEW IMPROVED CLINICAL SELF-REGISTERING THERMOMETER, as supplied to the Government Hospitals, in Solid Sterling Silver Cases, 3½-in., 14s.; 4½-in., 17s.; 6-in., in Wooden Case, 10s. 6d., including a Kew Certificate.

Catalogues may be had on application.

88, NEW BOND STREET, W.

HENRY J. HILLS,

Surgical Instrument Maker,

46, KING STREET, BOROUGH, S.E.

DISSECTING CASES AS USED AT GUY'S HOSPITAL.

Dressers Pocket Cases and Cases of Catheters

LARGE ASSORTMENT OF STETHOSCOPES AND CLINICAL THERMOMETERS.

INSTRUMENTS OF VARIOUS KINDS, AND APPLIANCES, SPLINTS, &c., &c., suitable for Gentlemen commencing Practice, also for Hospitals, Infirmaries, &c.

OPPOSITE BACK ENTRANCE OF GUY'S HOSPITAL.

Medical and Surgical Practice in London.

HOURS OF ATTENDANCE OF STAFF.

HOSPITAL.	MEDICAL. Daily.	SURGICAL. Daily.	OBSTET.	OPHTHAL.	DENTAL.
Charing Cross ...	1 p.m.	1 p.m.	Tu. F. 1.30	...	M.W.F., 9
Guy's	1.30 p.m.	1.30 p.m.	M. W. F. 1.30.	M.Th. 1.30 Tu. F., 12.	Tu. Th. F. 12
King's College ...	2 p.m.	1.30 p.m.	M. W. F., 1 p.m.	M.Th.,S. 1	Tu. F., 10
London	1.30 and 2 p.m.	1.30 and 2 p.m.	...	W. S., 9	Tu., 9
Middlesex	1.30 p.m.	1 p.m.	M.W., 1.30	Tu.F.,8.30	Daily, 9
St. Bartholomew's	1.30 p.m.	1.30 p.m.	M. Th., 2 W. S., 9.	Tu.Th. S., 1.30.	Fr., 9
St. George's... ...	1 p.m.	1 p.m.	Th., 2.	W. S., 2	Tu.S.,9.30 Th., 1.30
St. Mary's	1.15 p.m.	1.15 p.m.	Fu.F.,9.30	M.Th. 1.30	W. S., 9.30
St. Thomas's ...	8.45 a.m.	8 a.m.	W.F. 12.30	Daily, 2, ex. S.	Tu. F., 10
University College	1.15 and 2.30 p.m.	1.30 and 2 p.m.	Daily, 1.30 ex. W. & S.	M. W.F., 2	W., 10.30
Westminster ...	1.30 p.m.	1.30 p.m.	Tu. F., 3.	M. Th., 3	W. S., 9.15

TERMS OF SUBSCRIPTION.

The "Gazette" will be sent, post free, to any address in the United Kingdom for—One Year, 5/6.

If addressed to the Hospital—5/.

Single Copies may be obtained at the Lodge, or at the Publishing Office, 43, Borough High Street,—Price, 6d.

All communications for insertion should be addressed to the Editor.

Country Subscriptions, Advertisements, and Business Communications, must be sent to M OTNBGKB, UCAULOS Guy's Hospital, to whom Post Office Orders, should be made payable at the Post Office, Borough High Street, S.E.

Clinical Lecture

October 8th, 1876,

ON ENLARGEMENT OF THE LIVER.

By Dr. HABERSHON.

(Continued from p. 127.)

The fourth case is one in which the enlargement of the liver is very great, and is associated with old disease of the hip; there is lardaceous disease, at the same time, however, we have an irregular projection from the gland.

HYDATID CYST.—Thomas L., aged 19, by trade a hawker, admitted Sept. 27, 1876. When five years of age he was run over by a van, and the left hip was injured, he apparently recovered, but when eleven years of age pain and cramp in the hip came on after exertion. Chronic disease of the hip then manifested itself and for two months he was in King's College Hospital; in twelve months an abscess formed on the outer side, fetid pus was discharged, this discharge has continued, the part has become more and more flexed and portions of bone have come away. About twelve months ago he noticed enlargement of the abdomen, he could not stoop comfortably, he found a hard lump below the ribs; this however gave no inconvenience. He has never suffered from pain, no jaundice, and no œdema of the feet, no vomiting, his appetite good, but he has had occasional hæmoptysis. He is greatly emaciated, the hip is flexed, fixed, and riddled with sinuses, the liver dulness extends to two inches below the umbilicus, its edge is sharp and the general surface is smooth; but in the epigastric region is a projecting rounded portion yielding and resilient and in which fluctuation could be felt; the projection is one and half inches in diameter. It is free from pain and is evidently connected with the liver; it rises and falls with it. The breath sounds are normal. The heart is normal. Urine, sp. gr. 1012, about $\frac{1}{4}$ albumen, no sugar. The absence of thoracic disease, the long persistent discharge, suppuration and disease of bone, which is so frequently the cause of lardaceous disease, and the presence of albuminous urine indicating disease of the kidney, leaves little doubt that the enlargement of the liver is due to lardaceous degenerating amyloid disease as it has been termed. This association with suppurative disease has by Dr. Dickenson been referred to the separation of the salts of potash and the consequent deposition of the fibro-albuminous product in the tissues. This deposition is at first and especially in connection with the capillary arterioles they are found to be thickened throughout the affected organs, and in the liver may be traced to the circumference of the lobule. The gland has a hard, dense, bacon-like appearance, hence the term lardaceous; the hepatic cells are changed, the nuclei are less distinct, as if there was albuminous secretion in them, and with iodine the colour is rendered of a dark brown appearance. This applies equally to other structures affected with lardaceous disease. It seems to be an albuminous product, the result of change in the blood composition, and is not in any sense starchy or amyloid in character. As far as this disease is concerned it is not curable by any means we are acquainted with, it may be relieved by improving the general health. The presence of a cyst in the liver is a coincidence; it had all the character of hydatid cyst; painless, no interference with the general health on account of its presence, resilient; and being convinced that this was probably hydatid and that it might increase and lead to pain if not to suddenly fatal termination by its rupture I thought it well for the fluid to be drawn off. The sources of fallacy are whether it was abscess, but there was no pain nor tenderness, no interference with general health, no rigors, &c.; and second, was it a distended gall bladder; it did not possess the pyriform shape of distended gall bladder, nor was it in the position of the gall bladder at the edge of the liver. I requested Mr. Davies-Colley to examine it, and he drew off 8 ozs. of fluid having all the characters of hydatid fluid, clear, non-albuminous, containing chlorides and full of minute echinococci and rounded cysts with the characteristic ring of hooklets. Since the operation he has been very quiet and is doing well, but we shall not cure the hip joint nor lessen the size of the liver.

The next instance of *enlargement of the liver* is in an old woman aged 63, in whom the disease is associated with jaundice and probably is of a *malignant character*. She was admitted Sept. 30, and gave the following history:—that she was well till November, 1875, when she had a bilious attack, then inflammation of the lungs. In March of the present year she noticed that the urine was very deep in colour, and in May the motions were white, jaundice then came on, and she rapidly lost strength. She has not suffered from pain nor has she ever suffered from gall stones. On admission the whole skin is found to be deeply jaundiced (black jaundice), she is greatly emaciated, and complained of itching of the skin.

July 2, 1876.—Tongue clean, appetite bad, motions of a white clayey appearance, urine very dark, sp. gr. 1028, loaded with bile pigment.

The thoracic viscera were normal. The liver could be felt about $1\frac{1}{2}$ inches below the ribs, its surface irregular and nodular, its edge rounded; no pain, spleen not enlarged, and no enlargement of other glands. Since admission the liver has increased in size, extending 3 inches below the ribs, in other respects she is about the same. The bowels have been freely acted upon and during last few days diarrhœa was experienced, but her principal complaint is of the intolerable itching.

The age of this patient is that at which cancerous disease is likely to occur. The freedom from pain indicates the absence of gall stone; there is pressure

upon the bile ducts and obstruction probably from enlarged glands; the obstruction of the ducts and their distension would account for some enlargement, but not to the extent seen in this case, nor would mere obstruction account for the irregular and nodular condition of the surface. Jaundice is not a constant symptom of cancerous disease of the liver, it is often the reverse; there may be pallor and anæmia, in fact as long as the bile ducts are free, and they often remain so, there is no jaundice. It is often remarkable how completely the liver may be invaded by cancerous tubera without the presence of any jaundice. Again, the absence of pain does not preclude the presence of cancerous disease of the liver, pain is often absent in this disease, it only occurs when the surface is involved, when there is much tension of the surface, and when there is inflammation or acute action. Cancerous disease comes on often gradually and is progressive, simple obstruction of the bile duct from unpassable bile comes on gradually, but is less persistent in most cases. It is true that simple chronic jaundice will produce emaciation but it will not produce the tubera. There is no evidence of syphilitic disease and syphilitic tubera in the liver do not cause jaundice. The symptom which she most complains of is a common one in chronic jaundice; namely, the intolerable itching of the skin especially at night, and is due to the circulation of impure blood. The elements of bile disturbing the capillary circulation and peripheral nerves. This form of disease probably commences in the course of the minute lymphatic vessels or gland tissue, and as the deposit increases the liver tissue becomes invaded and destroyed. If the deposit be abundant, the nodules large and the centre removed from nutritive supply, the centre degenerates, it softens down and appears as a depression. Death takes place from gradual exhaustion, sometimes from syncope and nothing can be done to cure though relief may be afforded; sponging by acids may relieve, the diet should be as nourishing as the patient can bear, but the stomach often becomes pressed upon or it is itself involved, and then vomiting occurs; the bowels should be gently acted upon, the strength should be economised, and as the powers fail sudden movements guarded against, for the heart becomes so feeble that sudden syncope may ensue. Tonics are of no real service.

In most cases the affection of the liver is secondary to the disease commencing in some other part, as in the stomach, in the mamma, the ovaries, the rectum, &c.

The following instance is of irregular enlargement of the liver in a man who has had epilepsy; he has albuminous urine, and there is doubt whether with lardaceous disease there is syphilitic deposit in the gland.

Matthias Rowe, 31, is in bed 14, he is from Gravesend, and by trade a basket maker. His father, 57 years of age, has ague; and his mother, aged 68, has enlargement of the liver, and occasionally loses consciousness. When six years of age he had scarlet fever, he was unable to walk for three months, but his legs did not swell. When fourteen years of age he was in St. Thomas's Hospital with ulceration of the legs, and five years ago was under Mr. Howse's care with ulceration of the knees. When ten years of age he had a blow on the nose, and for two and half years he had epileptic fits at intervals. The fits lasted for half to three quarters of an hour, he lost consciousness, but did not bite his tongue. Headache followed but no paralysis. During the scarlet fever he lost his sight. Five months ago he felt a "hard lump" in his right side, which increased in size, and he was troubled with flatulence and indigestion. On admission, the sight is lost, the pupil included. Tongue clean. On the right side the dulness extends downwards to within 3 inches of the anterior superior spinous process of the ilium, the liver is also dull. The abdomen is distended, 34 inches in circumference, resonant in front; the left lumbar region is dull. A hard mass can be felt in the right lumbar region continuous with the liver, but with a well marked depression, passing obliquely across it about an inch above the umbilicus. Fluctuation could be felt in the abdomen on admission, and the legs were swollen and œdematous. Urine of sp. gr. 1024, coagulable with heat and nitric acid. Pulse, 80; respiration, 21; temperature, 98·6°. Iodide of potassium and afterwards the copaiba resin mixture were given; the discharge of urine became more free, and the patient was relieved. Diarrhœa came on and the copaiba was left off. He has now returned to the iodide of potassium.

In this case we have a man of generally impaired health; he had scarlet fever, then epilepsy after a blow, and dropsy with albuminous urine. The anasarca does not appear to have been as we usually find it in inflammatory disease of the kidney; when the gland is large and white, it is of high sp. gravity and without casts of tubes. The old ulceration about the knees is also of a doubtful character. Was it syphilitic? He has apparently been exposed to hardship and privation. It is probable that the liver is enlarged from lardaceous disease, and the kidney is probably affected; but the liver in lardaceous disease is generally uniformly enlarged, unless there be some growth or cyst in it, as in the case previously described. It must be remembered that in his work he has had pressure on the side, and long continued pressure as from a light belt will indent the liver; still the projection seems to be too great for such an explanation, and it is possible that a fibro-albuminous deposit from syphilitic disease may have caused this mass. We are giving the iodide for this as a diuretic, but also with this supposition in mind. The health may improve, but the albumen will probably continue, and after a time the health be more decidedly impaired.

In nearly all the cases I have described the remedial treatment is at the best only palliative, for we have to do with organic disease and structural change that cannot be removed.

Clinical Lecture

ON HIP JOINT DISEASE.

By Mr. A DURHAM.

Mr. DURHAM began by remarking that this malady which is painfully common and awfully painful, is very apt to be overlooked in its early stages, and yet there is no disease in which early recognition is of more importance. In the large majority of cases, sufferers from hip joint disease have not at first a strumous diathesis. The disease is primarly local, and when not properly managed it leads to struma, or a low condition of the patient. Hence the importance of—1st, early recognition; and 2nd, proper treatment.

To illustrate the above remarks Mr. DURHAM drew a graphic picture of a child admitted under his care three years ago. This patient was fearfully emaciated one thigh having a circumference equal to that of two fingers, the other being still smaller. The suffering was intense and patient was always screaming with pain, on cutting down on the head of the femur, it was possible to remove the bone with the finger and thumb. In this case the whole limb with about half of the pelvic bone was removed, subsequently the remains of the pubes and part of the Ilium were cut away, the pelvic viscera being only supported by the pelvic fascia. During this operation the iliac artery was so diseased that tortion merely broke it off, and it was with difficulty tied up with a ligature. Notwithstanding this low condition, the patient at once began to recover and is now making flesh, and getting about as well as possible.

Three stages of the disease may be roughly described, which, although running into each other, are useful for practical purposes.

The 1st stage is that of *Inflammation* immediately following an injury, which is nearly always the starting point, although not always to be found.

Clinical evidence points to the commencement of the disease in the synovial membrane about the ligaments, and eepecially around the ligamentum teres either at its insertion into the acetabulum, or the head of the bone. From this starting point it spreads first to the bone, and then to the cartilage, sometimes on the contrary, it begins in bone and passes through the cartilage to the synovial membrane.

Signs diagnostic of the disease—The child feels a stiffness about the joint, and limps slightly, especially when he gets up, he walks this off during the day, but the next day is in the same condition. He is usually said to have growing pains. You notice that—1, The thigh is slightly flexed on the pelvis; 2, The foot is a little everted; 3, He limps slightly; and 4, Feels more or less pain; 5, When you abduct the limb, in nearly all cases the pain is increased, and this is so even when pressure on the part causes no pain.

A most common sympton is pain in the knee, or on the inner side of the foot depending on the nervous connection of these parts through the obturator. Pain however may be felt in the sole of the foot, when the disease probably starts at the posterior point of the joint, the nervous connection being the sciatic.

Examination.—The best way to do this is to make the patient lie flat on his back on a level table, put the legs down so that the popliteal space touches the table; on the diseased side the pelvis is now tilted up so that you can put your hand between it and the table, the healthy side is unaltered, if also you put your finger alternately on the two superior anterior spinous processes of the Ilium, and then move the limbs of the same side, you perceive that on the diseased side the spine glides under the finger on movement of the limb, whilst on the healthy side no motion takes place in the spine.

Having made your diagnosis the treatment is rest, and many splints may be applied with this object, Thomas's being perhaps as good as any.

(To be continued.)

Mental Diseases.

By Dr. G. H. SAVAGE, OF BETHLEM HOSPITAL.

NOTES ON LECTURE VI.

CASES OF MELANCHOLIA.

We shall begin by considering recoveries of acute cases, male and female; next, similar ones that died; and then some that became chronic.

H. B., aged 25, single, engineer. Insanity on maternal side and genius on the paternal. For some months before admission had been much worried by business. Had been sober and over studious. Three months ago attempted suicide. Two and a half months ago wandered from home and walked long distances, all the time thinking of drowning himself but wanting the determination. He thought he must go to hell and all his friends would go to heaven. He became untidy and careless in dress, restless and sullen. Appetite variable, at times ravenous. He had given himself up to masturbation.

On admission he was solitary and unoccupied, restless at night, and careless about his appearance. For some time he suffered from weakness due to his fasting and wandering. He then began to improve; the improvement was not steady, and he had several relapses, but each less marked than the former. He had no medical treatment as the regular diet and exercise seemed to be answering well. He was sent to work in the garden and then steadily improved, and five months after admission he was discharged on leave, and at the end of another month left cured. He took a sea voyage, and has since (2 years) kept quite well.

The next is a contrast to the above from the unfavorable age of the patient and the nature of the delusions.

Fred. E., married, 59, an officer who had served abroad. Two relatives on father's side were insane. Domestic worry had caused his first troubles. Three weeks before admission he became dull, said his life was a burden to him. He attempted to cut his throat and attacked his wife. He gradually developed delusions, fancying his bladder was burst and his blood inflamed. He next refused food as he thought his throat was stopped. Slept badly.

On admission he was a weak-looking old man, dull, suicidal, sleepless, and refusing food; dirty at times, because he denied that anything passed through his bowels, and so he allowed everything to pass under him. He was obstinate and had to be fed. I put him on five grains of aloes and one of quinine twice a day, later once daily, at night; this produced one or two natural stools daily, and he rapidly lost his delusions about the stoppage of his bowels and took food freely. Within a month he was convalescing. About two months after his admission I discontinued the pills and gave him nux vomica, and within five months of his admission he was discharged well.

The next case is that of a young woman, who rapidly got well.

H. B., single, 20, an accountant. Strong taint of insanity on mother's side. This was her second attack. No known cause. A month before admission became dull and threatened suicide; said she had most horrible sensations, which ended in a determination to commit suicide. At times would swear terribly.

On admission, the patient was sallow and pale, well nourished, sleeping fairly, and taking her food well. Solitary and idle, with dread of herself and her feelings. The quiet of the hospital rapidly improved her, and shower baths assisted in a rapid cure.

This patient will, however, be subject to similar attacks, or may kill herself before the symptoms are fully developed. Strong hereditary taint facilitates break-down, and also repeated cure.

The next is a case of rapid cure, but we have also a history of recent recovery from rheumatic fever.

A. E., married, aged 27, one child. Three insane relations on mother's side. Had rheumatic fever six months ago; this was said to have been followed by an attack of typhoid. She fancied first that she had injured everyone, and was very depressed and silent; at times she burst out swearing for a few moments in an objectless way.

On admission, she was dull and solitary, quite unoccupied; very weak, without appetite; quiet in bed, but sleepless. She had full diet and stimulants, with some tonics, and slowly improved. I then put her on tincture of hellebore as she was suffering from amenorrhœa; menstruation appeared and she at once seemed well. Five months effected her complete cure.

Next we come to cases of death. The prognosis depends most on the age and the power of taking or assimilating food.

William B., married, 59, missionary. Father committed suicide while insane. Had had much mental anxiety. First symptoms came on three months before admission with excessive reserve, thought his soul was lost, suicidal, sleepless, with pain in head.

On admission, he was a weak worn-out man, who refused his food and was sleepless. For some time he improved slightly, but I did not like the drawing of the angle of his mouth down and the rigid state of his vessels, thinking the case was one of progressive senile decay. My idea was correct, for though he rallied several times, each time he slipped down lower, and finally his breathing became implicated and he died four months after admission.

The brain weighed 54 ounces, but the convolutions were wasted over right occipital region, and there was great excess of fluid in arachnoid and ventricles. The skull was narrow in front.

The last of the acute cases I shall mention is that of a woman who died.

H. F., single, aged 49, a governess. Sister insane. Money losses the cause of trouble. General health has been failing for two years. Recently lost self-control; said she must die or kill herself; at times excited in her despair. Fancied she had many diseases. Thinks she is in hell.

On admission, a worn emaciated woman, totally unoccupied, refusing food, sleepless, acne on face. We began by feeding her with the stomach pump, and she then took some food. She, however, gradually lost ground, her breathing became shallow and breath offensive. She died within five weeks of admission.

Brain, much wasted, 41½ ounces. Lungs, congested. Cirrhosis of liver.

The next case, though young, never improved and became chronic.

Edith B., single, 23, governess. No insane relations. Has suffered from neuralgia a good deal. Over-study said to be the cause. Three months before admission became dull and depressed. Thought she was awfully wicked and was coming to poverty; says she must kill herself. Sleepless, appetite bad, menstruation scanty and painful.

On admission, she was a big, fat, flabby, pale girl, restless, miserable, and unoccupied. She used to pick herself and moan all day long. All kinds of treatment were tried, such as shower baths, tonics, galvanism, and enforced employment, but no improvement followed. Her appetite improved, and with it her sleep and general health; menstruation could not be regularly re-established, and after a twelve months' care she was discharged uncured. The general physical improvement without the least mental gain made us look unfavorably on the case.

As in mania some cases are chronic from the outset, and we have always some of these. Many of them are the results of wear-out and are the beginning of the end. Others are associated with some visceral trouble that we cannot localize. Thus,—one patient, in at present, obstinately refuses to take food, having morbid sensations in his abdomen, and he is gradually losing strength. We had one patient who was bed-ridden for years, he lived on the smallest amount of nourishment, and for months had no action of his bowels; I tried once, after constipation of nine weeks, the effect of an enema, but this produced alarming collapse; a second injection eight weeks later produced the same effect, and so we let him live his life out undisturbed. Beyond a wasted brain we could find no cause for all this.

Chronic cases may result on acute attacks, as seen above, and these cases may live for an indefinite time, establishing a new mental basis on a cloudy level. Thus,—one patient now in Bethlem has hardly spoken, except to say "how do you do," for ten years, and yet he appreciates much that goes on about him, as shown by his re-action to his surroundings. These chronic cases may be persistently dull or persistently active in their misery.

Patients may have attacks occurring at longer or shorter intervals.

Edward G., single, 23, musician. Sister insane. Has had previous attacks, in one of which he attempted suicide. In the intervals is quite well. Each attack lasts from three to six months; all the attacks are similar.

Thomas N., widower, 49, preacher. No insane relations. Has had one previous attack 18 years ago, and has been well since and followed his calling. Grief at the loss of his wife produced this attack. In both attacks he fancied he had sinned beyond forgiveness, each lasted twelve months and it was not till his removal home that he really recovered. We had another case that had a second attack after 23 years of health, he recovered at 68, and has now been well two years.

Patients may have mania on one occasion and melancholia on the next.

Some of the most striking cases are the true recurrent ones, of which we have many on our incurable establishment. A female patient remains in perfect health for one or two years and then passes slowly into profound melancholy, again slowly to emerge after being many months under a cloud. Some of our brightest patients are subject to such attacks. These cases are often discharged once or twice cured, but will not stand out of an asylum. Grief may precipitate a recurrence.

The space left will only allow me to suggest the nature of the other cases.

P. was a good example of simple melancholy. Single, 32,

solicitor. Brother insane. He gradually became unfit for work from a growing indecision, this gradually increased. He felt miserable and useless, without power or energy; he spent all his time in wondering what was best to be done. After two years of unsuccessful treatment he was discharged uncured.

It is not uncommon to see such cases become chronic; but sometimes in simple melancholy the cure is sudden, a will seeming to be raised, leaving the patient free and well at once. We have had several such cases of late, and my colleague, Dr. W. Oby Williams, has treated of them in St. Thomas's Hospital Reports, 1876.

The active cases are much more striking in appearance. The activity may result from morbid feelings, hallucinations, or delusions. One girl was always wringing her hands and whining because she thought her flesh and bones were not like other peoples. Another follows the doctors about and abuse them because they have killed her family, and the sight of her children does not re-assure her; she still thinks they are apparitions. Another who is deaf hears the preparations being made for her burning, and resists and is distressed; but the most marked case I have to bring before you is one you may have all seen, the one of "automatic sorrow," a woman who for years has rocked herself backwards and forwards, wringing her hands, and repeating "I don't know what to do;" this process goes on for 14 or 16 hours a day, and then she sleeps.

In contrast to these are the cataleptic cases. A cataleptic state is not uncommon as a result of melancholy. In appearance, cases of stupor or stupidity are like these. We have had several young cases lately and one is now recovering.

A. P., single, 22. Sister melancholy as result of fall. Two months before admission became depresssd, refused food, would not dress herself or speak. She gradually became a picture of stubborn woe; she looked wretched and ill, and would stand utterly regardless to the calls of nature, always in one place and one attitude. She allowed mischievous patients to strip her. She had to be fed with everything at times with the stomach pump. This lasted for six months, when she gradually began to improve and will soon be discharged cured.

We shall have to take another opportunity for considering delusional melancholy in its various relations, senile melancholy, and the state associated with phthisis, syphilis, ovarian, and other diseases.

JUNIOR GUYITE CLUB.

The second annual dinner and general meeting of the above Club took place on Wednesday, November 8th, at the Criterion, and passed off most successfully, Mr. H. Williams, the President for the year, being unavoidably prevented from attending, his place was ably filled by Mr. H. Burton, who found a most efficient supporter and vice Chairman in Mr. A. de W. Baker. The minutes of the previous meeting having been read and confirmed, Mr. E. Amphlett was unanimously elected President for the ensuing year. The names of thirteen candidates, having been submitted to the meeting and a ballot held, all were declared elected members of the Club. Numerous toasts followed, those of "Our Club" (The President), "The Staff" (Mr. Amphlett), and "Prosperity to Guy's" (Mr. Puley), meeting with a most enthusiastic reception. Alternations of eloquence and melody, brought a most enjoyable evening to a close.

We take this opportunity of contradicting a prevalent rumour, to the effect that the Hon. Sec. was discovered by the early morning scrubber of the establishment asleep, with his head in the loving cup—It was a wine cooler.

NOTES OF THE MONTH.

INSANITY IN THE UNITED STATES AND IN OTHER COUNTRIES. That insanity does not increase *pro rata* in the United States is proved by the Census returns for the past twenty years. In 1850 that country had a population of 23,191,876, and a total number of insane and idiots of 31,397, or 1 in 378. In 1860, with a population of 31,443,322, there were 42,864 insane and idiots, or 1 in 733. And in 1870, with a population of 38,555,983, there were 61,909 of that class, or 1 in 623. In England during the latter period, there was an average of about 1 in 450; in Scotland, 1 in 460; in Ireland, 1 in 400; in France, 1 in 600; and in Australia, 1 in 524.

On the 1st of last January the Russian Army possessed 2,102 surgeons, 250 apothecaries, 6,887 assistant-surgeons, and 173 veterinary surgeons. This gives one surgeon for every 407 men, one apothecary for every 3,454 men, and one assistant surgeon for every 161 men.

MEDICAL STUDENTS, 1876.—The following is a list of the number of students of medicine registered at the Royal College of Surgeons of England this session from the metropolitan schools, distinguishing the new entries for the session. It will be seen that the number of new students is large, especially at the great city hospitals; 1. St. Bartholomew's, 374, including 131 new entries; 2. Guy's, 317, including 95 new entries; 3. University College, 279, including 79 new entries; 4. St. Thomas's, 177, including 43 new entries; 5. St. George's, 136, including 33 new entries; 6. London; 123, including 35 new entries; 7. King's College, 105, including 28 new entries; 8. Middlesex, 101, including 38 new entries; 9. St. Mary's, 82, including 26 new entries; 10. Charing Cross, 70, including 29 new entries; 11. Westminster, 28, including 9 new entries. The gross number registered amounts to 1,793, including 546 new entries, distributed in the following numerical order: 1. St. Bartholomew's, 131; 2. Guy's, 95; 3. University College, 79; 4. St. Thomas's, 43; 5. Middlesex, 38; 6. London, 35; 7. St. George's, 33; 8. Charing Cross, 29; 9. King's College, 28; 10. St. Mary's, 26; 11. Westminster, 9. The above includes dental students.

The Manchester papers announce that Mrs. Crace Calvert has presented to Owens College the sum of 700*l.* for the foundation of a scholarship in chemistry, in memory of her late husband, Dr. Crace Calvert, F.R.S. The scholarship will be of the annual value of 25*l.*, and will be competed for by members of the evening classes.

It is not always the case that Northern troops resist the cold better than others. During the terrible retreat from Russia in 1812 it was remarked that the Neapolitan cavalry suffered less than any other corps.

Antiseptic Surgery.—Dr. John T. Hodgen, Professor of Surgery in St. Louis Medical College, opened a discussion on antiseptic surgery, and laid down the following propositions. 1. Putrefaction may and does occur in the solids and liquids of the body, both with and without the direct contact of germs borne in the air or water. 2. Putrefaction of the solids and liquids of an open wound may in many cases be prevented if the contact of living germs with the surface is not permitted, or by destroying their vitality after contact with it. 3. It is possible that the living solids and liquids of the body may be so altered that they shall not furnish the conditions necessary to putrefaction. 4. Practically, the conditions to be met in preventing putrefaction are so diffcult that in many cases it is impossible to comply with them. Yet, even partial success is eminently worthy of our best efforts. The debate was prolonged and was adjourned to the next day.

GUY'S HOSPITAL GAZETTE, *DECEMBER*, 1876.

OLD Guys' men must be struck with the improvement that has taken place in our class teaching since their time. Even within the last few years this has been constantly progressing, and year after year fresh classes have been formed, nor have men been found wanting to fill them. Compulsory as are the classes in Practical Surgery and for men going in for the College Examinations, the number of men attending them is necessarily large; but classes like those on Gynæcology which have lately been formed have no such element of compulsion about them, and yet the number of men attending them is sufficient to testify to the value in which they are held. But this is not surprising if we consider the benefit of such teaching. We suppose that all men feel a tendency to read up in some particular direction to the neglect of others, and hence a system which compels attention to particular subjects at definite times, cannot but be valuable in correcting this tendency. Improving however as our class-teaching undoubtedly is, we will now endeavour to point out a subject for which more opportunities might with advantage be provided. Those who remember the time when the practical study of Histology was left to the care of the individual students must think the classes which are now held on this subject a grand advance; nor would we say one word in disparagement of demonstrations as full and able as those given at the other London schools. The study of Histology must, however, be looked at from two points of view, and the students of the subject divided into two classes. There are, first, those who wish to gain enough practical acquaintance with the subject to give them a knowledge of the structure of various organs with sufficient training of their faculties of observation, to recognize bone, &c., at the College, or to mount and imperfectly describe a specimen at the University of London. For these, the classes of our Hospital are sufficient, or, rather, much more than sufficient. But there is another, although smaller class, who wish to gain a real groundwork of knowledge and to train their powers of observation sufficiently to be of use to them in after life. Possibly they are ambitious to try and unravel some of the intricacies with which the pathology of disease is surrounded; or they may merely wish to be able to discriminate the value of theories founded on insufficient hypotheses, or based on inaccurate observations, which it is becoming the fashion to propagate, and which are constantly making our confusion more confounded. At any rate, they want a *practical* acquaintance with all the best methods of imbedding, cutting, staining, and mounting of specimens, which can only be gained in a laboratory containing the necessary apparatus and re-agents, but which, we are sorry to say, is impossible to gain at present at Guy's. Further, we believe it is impossible to gain this necessary acquaintance with "methods," or to cultivate the powers of observation properly, at large classes, of which more than half the students care nothing about it, while another quarter are unwilling to take the requisite trouble or give the necessary time. We would urge this view strongly upon the attention of the "Authorities," because we know that there is a growing feeling among all the best men at the Hospital that a Histological Laboratory is a most pressing want. We believe, that if provided, it would be constantly used for the preparation of Histological and Pathological specimens. It is impossible for students to study these subjects properly in their own rooms. Apparatus which may only be occasionally used are too expensive, and re-agents are too troublesome, to allow of its being done. If attempted, the bottles have a happy knack of getting upset, and one's bills assume gigantic proportions even if one's landlady does not altogether object to having her tables burnt with acids and her towels stained with nitrate of silver. An attempt has been made to bribe the best men to Guy's by increasing the opening scholarships, but the attempt has proved more or less a failure. Guy's will attract the best men when the advantages she offers are decidedly in advance of the other schools. Already in some subjects she offers the most undoubted advantages, with which other schools would find it vain to compete, and year after year she is making her class-teaching more efficient. Her most pressing want is a Histological Laboratory with an Assistant Demonstrator to aid the students, and this want we hope the "Authorities" will quickly supply.

Physical Society

Meeting November 4th, 1876,

MR. DAVY IN THE CHAIR.

The minutes having been read, the Chairman called upon Mr. W. D. HARTLEY to read his paper on "The Physiological and Therapeutical effects of Tobacco," of which the following is an abstract:—

Tobacco has a beneficial antiseptic effect upon teeth, but hardens gums, increases saliva (a natural safety valve), causes a very common affection known as smokers sore throat. Is a most pernicious irritant to stomach, being a prominent cause of dyspepsia; stimulates muscular fibres of intestine; causes diuresis, but does not affect bladder; liver affected secondarily to stomach. Is a powerful cardiac sedative, and fruitful source of functional cardiac disease. Experimentally had found that tobacco diminishes number of red corpuscles. Respiratory tract irritated. Effects upon nervous system not well understood. Epilepsy and other nervous diseases on somewhat insufficient grounds attributed to tobacco. Also is assigned as a cause of atrophy of optic disc. Dilates pupils and frequently causes prolonged retention of images upon retina. Relaxes muscles. Comparative innocuousness of tobacco depends upon the rapid elimination which it excites. A powerful agent in checking time-change, and very unfavourable to energetic bodily or mental action. Should be strictly forbidden to youths, likewise to phthisical patients, on whom it exerts directly or indirectly very deleterious effects. Therapeutically, tobacco has been used in strangulated hernia. Smoking is sometimes, but erroneously, ordered in asthma. Tobacco is a powerful emetic. Many authorities, notably Mr. CURLING, speak of it as most useful in tetanus and strychnine poisoning.

Mr. HORROCKS, in opening the debate, said that the teeth were discolored by carbon only when the smoker was not scrupulously clean. He believed it was pyridine, and not ammonia, which caused salivation in many people. He did not think Dr. RICHARDSON'S statistics of much value, as you would probably find as many enlarged tonsils in non-smokers as in smokers. He remarked that tobacco produced dyspepsia not by its direct effect on the walls of the stomach, but by secondary nervous influence. He failed to see how the essayist had discovered the diminution of the red corpuscles through smoking. He thought tobacco both appeased the pangs of hunger and made food go further. He had known it of much use in some cases of asthma. The composition of smoke was not yet decided. VOHL and EULENBERG say that nicotine is destroyed by burning and does not exist in the "smoke" of tobacco, whilst STENBEL says tobacco smoke undoubtedly contains nicotine. Cigar smoke contains less of the volatile bases, and so is less noxious.

Mr. RUSSELL observed that with regard to the analysis of tobacco smoke, as given by Mr. HARTLEY, there was one omission which ought to be supplied. If you took a bladder and filled it with smoke and applied a light, it would be found that the smoke would burn. This was due not only to the presence of carbon dioxide, but also of carbon monoxide; which was the omission made. He was of opinion that it bore an important place in the analysis; for, probably, the great irritation produced by tobacco smoke on phthisical patients was due to the presence of this gas. With regard to the experiments referred to as made by Sir BENJAMIN BRODIE, infusion of tobacco was used and not nicotine. Another observer in a similar experiment employed the empyreumatic oils of tobacco (which contained nicotine) with different results; he found that the heart was in nowise paralysed, but that on exposure it was found to be beating vigorously. He (the speaker) did not think that tobacco acted so much on the brain as Mr. HARTLEY made out. He rather thought it acted on the motor nerves; for in a man who sits up reading half the night it is muscular restlessness which requires to be subdued, and a pipe just did that.

Mr. UHTHOFF thought the subject a very important one. The best tobacco, he said, contains the least nicotine and most of the aromatic principles which give the soothing effects. He thought tobacco relieved tooth-ache sometimes. He considered it very doubtful whether the increased flow of saliva, when mixed with the smoke, would help digestion. He agreed with the last speaker that dyspepsia was due to sympathetic nervous action. He called attention to the fact that the ethyl and methyl derivatives of nicotine do not paralyse the motor nerves.

Mr. SHAW remarked that with regard to the use of tobacco smoking in asthma, there ought to be a difference from the *modus operandi* of an ordinary smoker. Thus, instead of puffing in and out the smoke as is ordinarily done, it was desirable in the asthmatic to inhale the smoke into the bronchial tubes so as to allay the spasmodic irritation that there existed. He then pointed out the value of tobacco as a purgative, and its use in the form of infusion for vaginitis. He also drew attention to the value of the smoke in the destruction of pediculi corporis. From accounts of the recent Eastern atrocities, he drew the opinion that tobacco acted as an antiseptic. He should be glad if Mr. HARTLEY would give some information on this point.

Mr. WAINEWRIGHT said the amount of carbon monoxide in tobacco smoke was very small. He thought the fœtor of the breath in asthmatic patients was taken away by smoking. Mr. HARTLEY said the pupil was dilated by smoking or in poisoning by tobacco, but KROCKER and HEISCHMAN say the pupil is contracted, and that it does not dilate even after cutting the cervical sympathelic.

Mr. MORGAN referred to a discrepancy in Mr. HARTLEY'S paper, and as it was of importance he was desirous to call attention to it. How could nicotine be useful for the production of labour pains on the one hand, whilst on the other it had been stated to produce muscular contraction? Would Mr. HARTLEY give some information on this point? He then pointed out what a variance of opinion there was as to the presence or absence of nicotine in tobacco smoke. He showed how extractive matter and oil were eliminated from the smoke of a pipe, and, by condensation occurring, the poisonous materials were expectorated owing to their unpleasantness in the mouth. He thought good tobacco was essential, and expressed an opinion that people would not give up smoking so readily as Mr. HARTLEY would lead us to believe.

Mr. SYMON thought smoking was a kind of pabulum for the brain. Our poets and artists, &c., were generally great smokers. He thought smoking made food go further through its sedative action on the stomach.

Mr. BRETT said that less stress had been laid upon the effects of tobacco on the eye than was at all justifiable or right. Tobacco amaurosis was not at all unfrequent, and was a disease pointed out by all ophthalmic surgeons, though Mr. HIGGINS was by no means a true believer in it. The affection was better known as optic neuritis in which some atrophic changes had also taken place: the disc was white and the vessels small, and there was some amount of congestion preceding. He then quoted the dimness of vision which troubled some readers of his acquaintance after smoking even one or two pipes only;

in one case the affection was so troublesome as to necessitate the complete cessation of smoking. Another case was mentioned in which a tobacconist, one of Mr. BADER'S patients, became completely blind after seven months; this was solely attributed to the effects of tobacco smoke. In conclusion, he strongly suggested the advisability of studying the effects of tobacco smoke on the visual apparatus whilst we had the opportunity, as it might prove invaluable to us in after practice.

Mr. REYNOLDS called attention to the fact that tobacco arrests the secretion of milk.

Mr. MEEK asked Mr. HARTLEY to explain the manner in which he had conducted his observations in reference to the effect of tobacco smoking on the blood corpuscles. He should very much like to know how the corpuscles were counted in the comparative experiments made, and what relation the red bore to the white. If the result was confirmed, it would prove an important experiment, and, therefore, ought to be more accurately described. He could not agree that smoking had any effect in the production of phthisis, for that affection was quite as common in women as men. He certainly thought it had some effect in the causation of dyspepsia. With regard to its sedative action on the brain, Mr. HARTLEY had recommended a glass of wine instead of a pipe to produce this effect, if needed; he certainly should recommend the latter rather than the former, for we see a vast deal less of the effects of tobacco smoke than of wine.

Mr. LOWDELL said that few habitual smokers could leave off the habit suddenly, tobacco being in this respect like opium. He could hardly understand how tobacco smoke could get into the lungs in asthmatic people. He said the pupils were generally slightly dilated. He believed the diuretic action of tobacco was explicable by the fact that so much drink was consumed whilst smoking. He thought if smoking did not produce salivation it did no harm, and would advise those who could not smoke without spitting not to smoke at all.

Mr. BURT enquired if nicotine were volatile. He thought it was not, and therefore we ought to look for some other body to produce the poisonous effects that often occurred, as no one knowingly swallowed the juice from the pipe.

Mr. DOWNS asked what was the use of tobacco; all other customs have their uses, but tobacco has none. He said, possibly the society of the present day required something soothing, and so tobacco might be a beneficial sedative. He thought tobacco had a very great influence in many ways, seeing it was so universally used. He remarked it as a strange but suggestive fact that tobacco was introduced just as we began to make great strides in the arts and sciences.

Mr. GATHERGOOD wished to know the use of the constant habit of smoking. He characterised the practice as a filthy one, and thought that it was but a proof of the truism that "use is second nature." When he was a first year's man he lodged with an inveterate smoker and was induced to commence that art, but it had such an effect in preventing his working and reading properly that he was obliged to give it up. Another pernicious habit had already been referred to during the evening, and, therefore, if tobacco smoking led to drinking, for that reason alone it should be given up. In reference to Mr. BRETT'S remarks on the effects produced on the eye, he was of opinion that pure atrophy took place without any inflammatory changes preceding, and that there was no œdema of the disc at all.

Mr. MORRISON said tobacco was a sedative, but asked if this were not gained at the expense of the keen edge of one's faculties. He said, spitting whilst smoking caused indigestion, whilst swallowing the saliva would be equally injurious, and, therefore, did not advise smoking.

Meeting Nov. 18th, when Mr. UHTHOFF read his paper on "Physiology in relation to Medicine."

Mr. UHTHOFF began by alluding to the importance of bringing our preliminary work, as much as possible, to bear on our after practical work. He thought that those who only worked for an examination, however hard that examination might be, gained far less benefit than those who looked farther forward. After referring to the comparatively small part of our physiological knowledge which was of use in studying medicine, he went on to show, by several examples, that, nevertheless, its practical application was so varied as to warrant a thorough study of the science. These examples were taken from the diagnosis of heart affections, the pathology of inflammation and of diabetes, the treatment of aneurism and of dyspepsia, with a few others. The paper was concluded by a suitable extract from Mr. HILTON'S book on "Rest and Pain."

Mr. HARTLEY, after thanking Mr. UHTHOFF for his paper, said that he thought too much importance had been laid on the subject. He did not think physiology was of so much importance to physicians as anatomy was to surgeons; for, since medicine was mostly empirical, their practice did not much depend on it, and, as a matter of fact, physiology had yielded but little aid to therapeutics. He thought students were more inclined to neglect their anatomy than physiology, which was always interesting, except perhaps histology, which was disgracefully neglected. He then spoke of the medical treatment of aneurism with opium and sedatives, and of the way in which leucocytes passed through the capillaries in inflammation.

Mr. RUSSELL felt that the strictures made by Mr. UHTHOFF on the manner the examination at the College of Surgeons was conducted were rather out of place, as the examiners, some of whom were our own teachers, ought to be above criticism. He found fault with Mr. UHTHOFF'S explanation as to the exudation of the leucocytes through the capillary walls, and called Mr. HARTLEY'S attention to his mistake in saying that muscles and tendons were composed of protoplasm. He would like some further explanation as to the causation of the rise of temperature in inflammation, and said that the present theory was like saying that "hot water pipes warmed a room and were in like manner heated again by that room."

Mr. LEE, in answer to Mr. RUSSELL, spoke of the murmur due to disease of an aortic valve, in which there was really a hole in the valvular apparatus, being termed an obstructive murmur when it was not.

Mr. DAVY thought the relation of physiology to medicine was most important. He believed the true way to look at inflammation in a part was to regard it as a local application of heat to the bloodvessels at this part of their circuit; it was due to cell activity at the part, and the current of blood passing through was heated above normal. He then spoke of alcohol in relation to fevers. Physiological chemistry had proved that, besides being a stimulant, alcohol prevented the destruction of nitrogenous tissues, lessening the amount of urea excreted, and hence some physicians still gave immense doses in cases of fever. The late Dr. ANSTIE had, however, shewn that in many cases very great pyrexia was unaccompanied by great urea formation, and that in these cases alcohol was unnecessary. He advocated the estimation of urea in all cases of pyrexia before giving large doses of alcohol, which, by deranging the digestive system, much retard convalescence.

Mr. WAINEWRIGHT made a few remarks which our reporter could not hear.

Mr. DEANE agreed with Mr. UHTHOFF in thinking the relation of physiology to medicine important, and if it were not so he did not think two years would have been set aside for its study. Men talk of practical and theoretical men, but he believed both were essential to the welfare of the profession and without

the latter medical science would never advance. He thought if a man studied physiology well he would see what was essential to help him in medicine, and he strongly recommended those who had time to make a special study of physiology.

Mr. MASTERS acknowledged that he owed a great debt to physiology in his work in the wards, and thought that physiology ought to stand in the same relation to medicine as anatomy does to surgery; and thought that in administering remedies their physiological action ought to be considered, and thus he would better succeed who combined theory with practice.

Mr. WHITWORTH spoke of some observations of Mr. BRUNTON'S on pulsation in the jugular and pulmonary veins.

Mr. MACKERN thought that if physiology were better known the tendency to consider disease as being generated by some foreign matter germ, vibrione, or whatever name you might give to it, in the system would be less, and all disease would be traced back to first principles, and thus was the practical application of physiology of every use in medicine.

Mr. WOOLRIDGE compared the relation of physiology to medicine to that of grammar to language, or of harmony to music. No doubt it was not absolutely essential; but, as an ungrammatical man cannot be a good speaker, so a man with no knowledge of physiology cannot be a good physician.

Mr. LOWDELL took up the cudgels in defence of college men against Mr. UHTHOFF'S attack on them, and maintained that something more than theory was necessary in the treatment of disease. He was disappointed in not hearing anything in Mr. UHTHOFF'S paper of the physiological action of drugs on the system, as he thought that to be of the greatest primary importance.

REFLECTIONS OF A FŒTUS:

FROM THE MEMOIRS OF AN UNBORN ONE.

BY DR. LIVIUS FÜRST, LEIPZIG.

PREFACE.

I have the honour of laying before the Gynæcological Section my feeble attempts at a memoir of my intra-uterine existence. My apology for the sketchy and feeble style of my story must be my extreme youth, imperfect education, and the most unfavourable and confined locality in which I have hitherto spent my time.

CHAPTER I.

Where am I? Just as every lady who has fainted, as a matter of course on recovering wants to know "where am I?" so I should uncommonly like to know "where am I?" To tell the truth I am quite confused, not to say stupid, though it is hardly fair to expect anything else considering the imperfect development of my cerebral vesicles. Moreover, except myself, there is not a soul to be seen in the whole area germinativa. I find it awfully slow. Somehow I don't think that I look anything very wonderful—with my few primitive vertebræ. Besides, my medullary canal is still open, and I rather think makes me look like a schoolboy. It is lucky there is no one here to see me. The best thing I can do is to draw my amnion over my head and have a nap.

II.

When I rubbed my ocular vesicles this morning and peeped through the swollen rudiments of my lens, I really could hardly believe what I saw. There's no doubt of it. I must have grown tremendously during the night, and I could clap my hands for joy—if I had any; but unfortunately I have got merely the veriest suggestions of limbs, and they are of no use at all yet. Patience, patience, all in good time.

My, certainly very primitive, heart beats faster with the thought that I am beginning to be more independent. Nevertheless, I wont carry my olfactory groove too high while I am trying to raise myself to better things from the primitive groove, but wait modestly and patiently. Stop on the germinal disc and take care of yourself—That's the motto for me.

III.

Though, of course, it gives me great pleasure to lie all day in *dolce far niente* on the area germinative, I cannot help thinking, hour after hour, how it might be possible for me to free myself from these certainly necessary, but none the less wearisome bonds. Upon my word, I got a curvature of the head from thinking so much; this sort of thing must not go on any longer. My intestinal groove is still so open, that it will be a perfect marvel if I dont get a catarrh of the bowels.

Besides, it is very childish to go on any longer satisfied with the feeble nourishment. I really don't care to put up with this decreasing yolk-food.

I am fully entitled to demand a persistent circulation and proper nourishment; otherwise, to the deuce with further development.

I feel half inclined to do myself a mischief with a fold of the amnion.

IV.

Well, I feel in a better temper to-day; what a capital thing it is for a fœtus not to lose its sense of dignity and self-respect. During the night a splendid idea came into my middle brain. There had been a little secretion from my primitive kidneys, and I was expecting to fulfill a duty of nature, when to my shame I noticed that I had not got a bladder; but as I am daily making discoveries, I think it will be tolerably easy to lay down a plan for one. Suppose I use some of those folds I have been working so hard at lately, and reverse the posterior part of the bowels; I think that will do to make an allantois good enough for the present at any rate. Happy thought! how about using it for the purposes of a lasting vascular system?

V.

Matters are getting on better and faster than I could have expected, and I am as glad of it as if the heavens were full of cotyledons. The allantois got on so fast that I had hardly time to decide if it was spherical or flat at the beginning; but I will leave that for future embryologists to break their heads about. One thing is certain, the formation of my allantoid circulation went on with ape-like rapidity. Every hour brought fresh surprises. Meanwhile the umbilical vesicle has got so small, that in the struggle for existence, it will soon get the worst of it. I saw my likeness on its surface to-day, and—well I cannot say I am very good looking—but "Rome wasn't built in a day," and, with the assistance of mimicry, I can already bring my rudimentary jaws near enough to produce a friendly grin.

VI.

My heart nearly fell into the abdominal cavity to-day, as, to my horror, I noticed that my intestinal and urinary systems were still imperfect. Fancy! they unite in a common space: even a moderately decent fœtus cannot let such a state of things go on much longer. Something must be done at once! because you not only have to bend in time if you are ambitious of becoming a foetus, but you must not tolerate such anarchy in the excreting apparatus. The cloaca question busies me night and day. The best plan would be to build up a partition, and separate the two places for the greater and the lesser duties of nature. In addition to this question, I am tremendously excited about my future sex. I feel, it is true, the energy of a man, but will the force of my mind be sufficient to develop my sexual organs to the requisite point. Oh! this hanging and tossing in suspense.

VII.

Those were horrible days, during which I was in constant dread of becoming a pseudo-hemaphrodite. At last all fear is over. The conduits of Müller have disappeared with

scarcely a trace; the genital furrow has closed; the genital tubercle has developed gloriously; the genital folds have united to form a beautiful scrotum, and there is no room for doubt—"I am a man!" Everything is said in that. Besides, the perinæum is without reproach. What a lucky thing it was that I was on the look out, and drew my os coccyx in just in time. Fancy being written about as "the man with a tail." The only thing I am not easy about is the question of hare-lip; though my face has so distinctly the nobility of man stamped on it, that no one could be fool enough to mistake me for a pig's, rabbit's, or chicken's embryo.

VIII.

I believe I should have slipt out of my skin during the last few days if I had had one. The separation of the amnion from the coverings of my body went on capitally thanks to the abundance of the liquor amnii, though it stuck a little here and there, and there might have been a few epithelical adhesions if I had not used my really well-fitted limbs and struck out with a will. I have to be so continually on the watch to prevent these adhesions occurring, that it makes me quite nervous. Fortunately however, though the umbilical cord is very short, it gives me a chance to inspect my quarters. I must say they are not very brilliant, and the continual swaying movements from the varying fulness of bladder and rectum almost make me feel sea-sick.

IX.

In exploring my surroundings I have made myself more and more at home, and I am as pleased as a child that the liquor amnii, which I have studied to increase by copious urination, gives me plenty of room for free sport.

I have felt the ovaries, the fallopian tubes, the ovarian ligaments, and had many a game with the round ligaments, and made a few experiments on shortening and lengthening the umbilical cord.

Sometimes, however, the loneliness is awfully depressing, and I get so melancholy that I could almost pull out all the amniotic caruncles, but I argue with myself:—now no rashness; take up a quiet position, and give yourself up to meditation, my boy.

The clavicles and lower jaw begin to hurt. I must have over-exerted myself in those exploring efforts, or it may be commencing ossification. I do hope it may.

X.

In deepest retirement I celebrated to-day the change to the fœtal condition. As the last fold of intestine was drawn from the umbilicus, a feeling of greater dignity stole over me, just as it is with the soldier when he first gets his stripes as a non-comissioned officer. The still enduring, but practically extinct umbilical vesicle, I look upon as a scabbard as it were, and treasure with dutiful piety as a memento of my most tender youth.

This evening I had no slight shock. Instead of the gentle movements which the pelvic organs had as yet communicated to the uterus, I felt suddenly rhythmical and recurrent swaying undulations lasting for two or three minutes that I could not explain at all, until suddenly I managed to catch distinctly the sound of music—we were at a ball. We were dancing a polka, when all at once something went crack. There was a little bleeding from the placenta, and then all was still, and I began to fear that the catastrophe might prove dangerous for me. Who knows what would have happened if I had not hung on spasmodically with all my villi to the maternal placenta. The hæmorrhage ceased, and I breathed again, but not without swallowing a little water on the occasion.

Almost more unpleasant for me than the interruption of the circulation, was the administration of some narcotic, probably morphia, to still the contractions of the uterus. I got quite confused and began to fear that my last fœtal pulsation had arrived. I was quite astonished, for I had had no idea that the placental nutrition was carried on so vigorously. Well, no more dancing and medicine I hope, or I wont be responsible for the consequences.

XI.

It is always said that the fœtus does no work; this is not the case with me at any rate, for I keep moving all day long: I turn the umbilical cord all sorts of ways; I change my position; ten times in the minute I turn on my axis like a gymnast on a horizontal bar, and in the intervals of my exertions I listen to the uterine murmer, which charms me like æthereal music. Then I spend a quarter of an hour before the speculum, smooth my down and beautiful head of hair, which would be sure to fascinate any girl, if there were one to see. Unfortunately, at present, I have not that roundness and fulness of form which are necessary to make a sensation, and, on the whole, I think I must be about the awkward age just now. It is regular luck that pregnancy lasts only 271 days instead of 280 as they used to think. Nine days gained at any rate!

XII.

How interesting it is to listen to the conversation of the outside world through the thinned uterine wall. No more complaints of being slow; on the contrary, whenever I get a chance, I make fools of those around. One doctor wanted to determine my sex from the rapidity of my pulse; I amused myself by making vigorous exertions, and of course accelerated the pulse: so he diagnosed a girl! Another wanted to find out how long I was by measuring me in the bent position, so I kept first doubling myself up, and then stretching myself out again; but my favourite fœtal joke was to alter my position, for I irritated a lot of students, who were trying to learn position by touch, tremendously. Alas, to my shame be it known that I was in a hospital! A terrible disappointment, for I had thought myself to be of noble blood, and am but a son of the people.

XIII.

When my eyelids had separated, and the membrana pupillaris had disappeared, I noticed, so far as was possible in the semi-darkness, that my exterior also unfortunately gave evidence of my plebeian origin. Through the stickiness of my coverings gleamed the red of the commune. Nevertheless, I will use the short remaining time to perfect my body and intellect, which, indeed, I have in a measure done, through constant companionship with the medical men in the hospital and listening to their scientific conversation. At any rate, the atmosphere of science and culture surrounds me, and this shall not be lost. There is no doubt I am getting on in the cultivation of my body, especially in the case of my nails and the strengthening of the cartilages of nose and ears, though my developmental energy is chiefly confined to the production of fat. My mind becomes decidedly more clear. I feel that mine will be a great future.

XIV—AND LAST CHAPTER.

Owing to my much studying and thinking, and having for the last few weeks kept my head fixed on the brim of the pelvis, I certainly have some head-ache, but the thirst for knowledge, and my struggles for freedom and independence, and oxygen, permit me to endure these troubles with resignation. Over and over again I have tried to breathe, but the turbid amniotic fluid keeps getting into my throat and warns me to keep quiet.

271st day. 10 o'clock p.m.—Ever increasing contractions of the uterus have interrupted my idyll. These must be premonitory pains. My heart beats anxiously, and in my nervousness something has happened to my meconium, something that makes me realize my manhood.

Writing farewell, Reader Vale.

UNIVERSITY OF LONDON.

At the Final Examination for the Second M.B, the following gentlemen were successful:—

1ST DIVISION.

Mr. A. H. Jones, Mr. W. Kidd, Mr. W. H. Lamb, Mr. J. C. Ferrier.

2ND DIVISION.

Mr. H. Duke.

Some of the questions were as follow:—

OBSTETRIC MEDICINE.

1.—What are the various causes of feeble parturient action in the first and second stages of labour, but unaccompanied by pelvic or other contraction of the genital canal? Indicate the appropriate treatment under the several causes of inertia.

2.—Describe the preventive and curative treatment of post-partum hæmorrhage.

3.—Describe the characters, symptoms, causes, the dangers, and the treatment of inversion of the uterus.

4.—Describe the method you would adopt, and the principles that should guide you, in the artificial or "hand" feeding of infants.

5.—Under what influence and at what period of pregnancy does retroversion of the gravid uterus take place? Describe the mal-position, the symptoms which accompany it, and the treatment for the relief of a patient in whom urgent suffering has supervened upon the displacement.

6.—What are the causes, symptoms, and the principal indications of treatment of the condition known as "puerperal septicæmia," or "puerperal fever."

GENERAL PATHOLOGY, GENERAL THERAPEUTICS, AND HYGIENE.

1.—What are the principal morbid conditions resulting from the abuse of alcohol?

2.—What is the mode of action and what are the principal therapeutic uses of aconite?

3.—What remedial measures would you have recourse to in a case of profuse hæmoptysis? Describe their mode of action.

4.—How are dropsies produced? In what situations may they be found, according to their different modes of origin.

5.—With what conditions are variations from the normal amount of fibrin in the blood associated? What may be the effects of such variation?

6.—What are the effects produced by a long continued deficiency in the supply of food to the human body? What are the effects of a protracted insufficiency of the chief nutritive element individually?

SURGERY.

1.—Explain the mode in which fracture of the spine in the dorsal region generally proves fatal. Describe the appearances you would expect to meet with in the injured parts after death.

2.—Describe the various kinds of ulceration of the rectum, their symptoms, diagnosis, and appropriate treatment.

3.—Enumerate the causes of secondary hæmorrhage. Describe the treatment you would adopt in a case of profuse bleeding from the stump a fortnight after amputation in the lower third of the thigh.

MEDICINE.

1.—What are the physical signs, symptoms, modes of termination, and treatment of intrathoracic aneurism?

2.—Describe the cutaneous eruptions of typhus, enteric fever, scarlatina, measles, dengue, and rötheln.

3.—What are the main symptoms of hereditary syphilis, and in what respect do they differ from those of constitutional syphilis which is acquired?

4.—What diseased conditions give rise to hæmaturia? How is it to be recognized, and its causes diagnosed?

5.—What are the pathological appearances, causes, symptoms, and dangers of fatty degeneration of the heart?

6.—State the chief causes of obstruction of the bowels, their distinctive characters, and their treatment.

FORENSIC MEDICINE.

1.—The mutilated remains of a human corpse being submitted to you for examination, you are requested to state upon what facts you would base an opinion

(*a*) Of the probable stature of the individual while living;

(*b*) Of the sex, in the event of the most characteristic portions of the body being absent.

2.—Mention the chief narcotic poisons which have been administered with criminal intention. What are the general features of narcotic poisoning, and what morbid conditions may it simulate?

3.—Describe the post-mortem appearances observed in death by hanging. Mention the facts which must be taken into account in deciding, in such a case, whether the act was suicidal or not.

4.—How would you proceed to determine whether a red stain on linen was or was not a blood-stain?

5.—State the symptoms, differential diagnosis, and treatment of a case of poisoning by hydrocyanic acid. How would you detect the acid in the contents of the stomach?

6.—Describe briefly the most characteristic symptoms, and usual course of general paralysis of the insane.

SECOND M.B. HONOURS EXAMINATION.

FORENSIC MEDICINE.

Mr. W. Kidd, Gold Medal. Mr. A. H. Jones, 1st Division.

(The remainder of the Honours list is not yet know.)

PAPERS.

MEDICINE—(Morning).

1.—What are the symptoms of paralysis of the third, fifth, sixth and seventh (portio dura) cranial nerves?

2.—State the chief causes of hæmorrhage from the stomach, the means of distinguishing them, and their appropriate treatment.

MEDICINE—(Afternoon).

1.—State the pathological conditions which are associated with diminution of colour in the blood. Give the criteria for their individual diagnosis.

2.—Under what conditions does hyper-resonance of the thorax occur? What is the mechanism of its production under each of these conditions, and how are they to be distinguished from one another?

OBSTETRIC MEDICINE—(Morning).

1.—Describe the changes which the mucous membrane lining the uterus undergoes after impregnation, and its relation to the ovum.

2.—Describe the symptoms, premonitory and paroxysmal, also the causes predisposing and exciting of puerperal eclampsia. How would you conduct the medical treatment of the disease, and under what circumstances would operative interference be indicated for the accomplishment of delivery?

3.—State what you know of the varieties, symptoms, and treatment of malignant diseases of the unimpregnated uterus.

OBSTETRIC MEDICINE—(Afternoon).

1.—What are various causes of dysmenorrhœa? Indicate the appropriate treatment of the disease under its various aspects.

2.—Describe the disease called "pelvic hæmatocele." In what different ways may it arise? What other morbid conditions have sometimes been mistaken for it, and how may it be distinguished from them? Give the treatment and the results of the disease.

3.—What are the usual symptoms accompanying a case of chronic endo-metritis or uterine catarrh? Describe the treatment you would adopt.

FORENSIC MEDICINE.

1.—Consider the following questions in their medico-legal relations:—

(*a*) The vibility of the fœtus at an early period.

(*b*) The duration of utero-gestation.

2.—Give an account of the poisonous principles contained in opium, especially describing their action on the animal economy.

3.—What methods of treatment are suggested by a know-

ledge of the chemical properties in poisoning by the following substances:—Compounds of arsenic (*b*) phosphorus, (*c*) corrosive sublimate, (*d*) strychnia.

4.—Describe the principal varieties of mania and of melancholia, discussing them in their medico-legal relations to (*a*) testamentary capacity, (*b*) criminal responsibility.

Afternoon, 2 to 5, Practical Examination.

3 poisonous substances to be analysed—

(1) A metallic poison in an organic substance.
(2) An organic poison in an organic liquid.
(3) An organic poison in an organic liquid.

Correspondence.

TO THE EDITOR.

SIR,

In your impression of Guy's Gazette for this month you were good enough to insert a notice of the "sympalmograph," which I exhibited at the Conversazione, remarking that it was a machine which "*professed* to illustrate the harmonies of two notes on paper." With your permission I think I shall be able to show that it not only professes, but also performs.

It is well known that in order to produce a harmony by two notes, they must be vibrating in distinct and definite proportions to each other, otherwise a discord is the result. Thus, for example: in the octave, the upper note must be vibrating twice as quickly as the lower; if the lower vibrates 500 times a minute, the higher (to secure a harmony) must beat 1000 per minute. Now it would be impossible to draw from the actual vibrations of the strings themselves, for the velocity at which they vibrate would break pens or anything of the kind to pieces; but advantage is taken in the "sympalmograph" of the proportions in which the notes vibrate, the vibrations of the strings being imitated by swinging pendulums, and when a drawing of the octave is required, one pendulum is made to beat twice as quickly as the other. Thus having secured a drawing of the two extreme notes of the scale, it is easy to draw all the intermediate harmonies, such as the "fifth," the proportions of which are 3, 2; or the major third, 5, 4, &c., &c.

To prove that the drawings thus obtained are analogous to those actually produced by sound itself, I have only to refer you to Monsieur Lissajou's experiment with the two tuning forks, mentioned in Deschanel's Natural Philosophy (page 847), with which most of your readers will be familiar. This gentleman, by means of a mirror attached to one of the prongs of each tuning fork, was able to get a spot of light to travel on the disc of a telescope, which described figures exactly corresponding to those drawn by the "sympalmograph." The advantage in my machine is that the vibrations are permanently registered on paper, whereas in Mons. Lissajou's they could only be seen and not drawn.

I am, SIR,
Your obedient Servant,
J. ERNEST VINEY.

TO THE EDITOR.

DEAR SIR,

Will you kindly allow me to call attention to a grievance which men who are preparing for the second M.R.C.S. examination are subjected to, in being obliged either to attend at the out-patient room at half past twelve or one o'clock in order to secure a seat, or be deprived of even standing room, for it is well known that within half-an-hour after the *arrival of the assistant Surgeon, the room is invariably* crowded by first year's men. This, Mr. Editor, is I submit, a great hardship to those men who, through work in the Wards &c., cannot get down to the out-patient room before 2 or 3 o'clock.

Yours faithfully,
W. E. G.

Football.

GUY'S *v.* BLACKHEATH.

Played at Blackheath on October 21st. Guy's kicked off and for several minutes some severe scrimmages took place in neutral ground, at length the ball was brought close to the Blackheath goal, and Gray made a capital drop, which would have been a goal if the wind had not been so strong; Blackheath touched down in self-defence. After the kick-off the ball was again gradually brought to the Blackheath goal line, and the Hospital obtained another touch-down. After ends were changed the Blackheath forwards immediately carried the ball into the Hospital quarters and made Gray touch it down, after this the game was quick and very obstinately fought by both sides, nothing else being scored. The match terminated in a draw in favour of Guy's, by two touch-downs to one.

For Blackheath, Stokes, Shaw and Frazer played well, and for Guy's, Gray, Gilbert and Jackson.

BLACKHEATH.—H. Bradley, A. Poland (backs), L. Stokes (three quarter back), H. H. Murphy, R. Bicknell (half back), R. Stokes, W. Rawlinson, G. Shaw, J. A. Fraser, A. Benn, F. Hyde, F. St. Quintin, J. Rogers, J. A. Crawford, H. Sim, (forwards).

GUY'S.—R. E. Moore, Q. Veitch (backs), W. G. Gray, H. Welchman (three quarter back), F. Maclean, A. H. Jackson (half back). P. F. Gilbert (Captain), T. A. S. Howell, F. Wilkinson, R. S. Taylor, J. Rees, D. D. Roberts, J. Reader, Lister, H. Liddell.

GUY'S HOSPITAL *v.* FLAMINGOES.

This match was played at Battersea Park, on Saturday Nov. 18th, and ended in a win for Guy's by two goals, two tries, and several touch-downs, to nothing. The Guy's captain kicked off, and the ball was immediately forced by the Guy's forwards into the territory of the enemy. Stokes then got the ball and dropped a magnificient goal for Guy's. The ball was then set in motion by the Flamingoes' captain, only to be returned by Stokes, and Howell following up sharply up secured a try for Guy's, which was converted into a goal by Gordon. After half time M'Dougall got away with the ball and passed it to Stokes, who secured another try for Guy's, which however was disallowed on plea of "dead ball." Shortly afterwards Wilkinson touched the ball down again for Guy's, but the try was a failure. Howell almost immediately obtained another but the try again came to nought. During the remainder of the game the ball was kept close to the Flamingoes' goal line. For Guy's, Stokes and Howell were most conspicuous, the former's kicking being simply faultless. The Flamingoes were unfortunately obliged to play two men short.

GUY'S.—A. W. Pearson, Q. Veitch (backs), L. Stokes (three-quarter back), W. Gordon, F. McDougall (half-backs), Gilbert (captain), J. Rendall, T. A. S. Howell, R. S. Taylor, F. Wilkinson, C. Pink, H. Liddell, D. D. Roberts, A. H. Jackson, C. Collins (forwards).

FLAMINGOES.—H. Whymper, C. Few (backs), Ranwell (three-quarter back), G. Earnshaw, E. Cohen (half-backs), F. Harrison (captain), Shann, Bannister, Vaux, Holloway, Homersham, Hutchings (forwards).

At a General Meeting of the United Hospitals' Football Club, held at King's College, on November 20th, Mr. GILBERT was elected Captain.

THE ARCTIC EXPEDITION.

Without desiring to violate official secrecy, we may point out that the causes which prevented the late Arctic Expedition from penetrating at least much nearer to their goal are now pretty clearly made out, and have a great public interest extending beyond the range of Arctic exploration, or merely retrospective information. The expedition failed relatively because the commanders of the sledge parties

failed in the most vital matters to observe the instructions given to them for the maintenance of the health of their men. It seems incredible, but it appears to be absolutely true, that the sledge parties started without any supply of lime-juice, and that each man was expected to drag over the rough and mountaneous ice, a weight averaging upwards of 400 lbs. per man—just double the amount of exertion which could reasonably have been expected of them. Under the continuous influence of want of lime-juice and excessive exertion the joints of the men began to swell, and the characteristic blood-effusions to appear with intense depression and lassitude. The swellings were rubbed with liniment as if they were bruises, and even when the presence of scurvy was but too apparent, there was not any store of lime-juice to be used as a medicine. No wonder that when the remaining men still in health had to pull along the two sledges and the scorbutic invalids, they progressed only a mile a day. If the Admirality will produce the copies of the instructions for dietaries, the logs of the sledge parties, and the report from medical authorities on the same, it will be made apparent that an unfortunate neglect of the sanitary instructions given before starting, very early crippled the expedition. For all reasons, past, present and future, it ought to be understood that the precautions against scurvy enjoined by law in the Mercantile Navy, are as urgently necessary and should be as stringently enforced in the Royal Navy.—*San. Record.*

NEW BOOK.

We have received from Messrs Baillière & Co., the first part of Professor Bernard's work on operative Surgery. It is to be published in eight parts at 2/6 each, and, when complete, will make a very handsome volume. The text although concise is very readable, and apparently well translated; but the chief merit of the book appears to us to consist in the plates, which are certainly superior to anything of the kind we have seen; the dissections being drawn with great accuracy, and the various structures shown with a clear distinctness that is never met with in English works. If the succeeding numbers equal this we can predict for the book a large sale.

Microscopes! Microscopes! Microscopes!

TO STUDENTS.

FOR SALE—Two first-rate Microscopes by "CROUCH," London Wall; also a Binocular Microscope, and other second hand instruments. Apply—E. W. BURLS, 157, Great Dover Street, Borough.

SAVORY & MOORE'S

PHOSPHORUS PREPARATIONS.

PHOSPHORISED COD-LIVER OIL. First manufactured in this Country by Savory & Moore, and generally recognized by the Profession as the "Original Preparation." This Oil is now extensively used, and is admitted to be an important therapeutic remedy. The advantage of this preparation (which has been much imitated, though with questionable success) consists in, the ability to administer a *sufficient* dose of Phosphorus without the admixture of a *large* quantity of Cod Liver Oil *Vide* case of Phthisis treated by this Oil. *The Lancet*, April 24, 1875.

PHOSPHORISED COD LIVER OIL with QUININE.

COMPOUND PHOSPHORISED COD LIVER OIL, containing besides Phosphorus, Iodine and Bromine

SUPPLIED IN BULK OR SMALL BOTTLES.

PHOSPHORISED LINIMENT. A Continental preparation used with success in the treatment of Rheumatism, &c.

PHOSPHORUS PILLS of any size and strength, non-resinous, and perfectly soluble; the most reliable and agreeable method of administrating this remedy.

As much of the uncertainty of operation experienced in the internal administration of Phosphorus is to be traced to the use of Oxodised or Allotropic Phosphorus, Messrs. SAVORY & MOORE beg to state that the foregoing Preparations contain only the *purest* description of this article, which is more certain in its action, and therefore more satisfactory to prescribe.

Wholesale and Retail of the Manufacturers,

SAVORY & MOORE, 143, NEW BOND STREET, LONDON.

JOHN B. MEDLAND,

MICROSCOPE & SCIENTIFIC INSTRUMENT MAKER.

MEDLAND'S STUDENTS' MICROSCOPE, COMPLETE £3.
An excellent Working Instrument.

EVERY DESCRIPTION OF APPARATUS FOR MICROSCOPICAL PURPOSES, MOUNTING FLUIDS, GLASS SLIPS, CELLS, THIN GLASS COVERS, &c., &c.

CLINICAL THERMOMETERS from 7/6. URINOMETERS from 3/6.

Photographs of Guy's Hospital, Portraits of Guy's Medical Staff, Eminent Medical Men, &c., &c.

10a, BOROUGH, LONDON BRIDGE
(CLOSE TO THE RAILWAY ARCH).

NOW READY, SECOND EDITION, CROWN 8vo, 9s.

REST AND PAIN:

A Course of Lectures on the influence of Mechanical and Physiological Rest in the Treatment of Accidents and Surgical Diseases, and the Diagnostic Value of Pain.

By JOHN HILTON, F.R.S., F.R.C.S.

EDITED BY

W. H. A. JACOBSON, F.R.C.S., *Assistant-Surgeon to Guy's Hospital.*

London: GEORGE BELL & SONS, York Street, Covent Garden.

PRICE LIST

OF

HUMAN OSTEOLOGY

UPON APPLICATION.

J. MILLIKIN,

Sole Instrument Maker to

GUY'S & ST. THOMAS'S HOSPITALS,

3, ST. THOMAS'S STREET,

BOROUGH.

Printed and Published for the Presidents of the Physical Society by W. DREWETT, 43, Borough High Street, London, S.E.

THE WILLS LIBRARY
GUY'S HOSPITAL MEDICAL SCHOOL